COORDINATION AND CONTROL/NERVOUS AND CHEMICAL COORDINATION

Q.1 Which of the following receptors produce sensation of pain?
A. Mechanoreceptors
B. Nociceptors
C. Chemoreceptors
D. Thermoreceptors

Q.2 When a nerve impulse jumps from one node of Ranvier to the next in a myelinated neuron, it is called?
A. Membrane potential
B. Saltatory conduction
C. Resting potential
D. Action potential

Q.3 The right and left cerebral hemispheres are connected by a thick band of nerve fibres called:
A. Medulla
B. Corpus callosum
C. Pons
D. Hippocampus

Q.4 A nerve impulse is initiated by an appropriate stimulus under normal conditions which is called:
A. Threshold stimulus
B. Abnormal stimulus
C. Optimum stimulus
D. Saltatory stimulus

Q.5 The site of communication between nerve cells is called:
A. Synapse
B. Synapsis
C. Nodes of Ranvier
D. Interstitial gaps

Q.6 The number of spinal nerves in human is:
A. 12 pairs
B. 24 pairs
C. 31 pairs
D. 62 pairs

Q.7 In neurons the sodium-potassium pump actively transport:
A. Cl^- in and Na^+ out of the cell
B. Ca^{2+} in and K^+ out of the cell
C. Na^+ in and Cl^- out of the cell
D. Na^+ out and K^+ into the cell

Q.8 The CNS is protected by:
A. One layer of meninx
B. Two layers of meninges
C. Three layers of meninges
D. Four layers of meninges

Q.9 The part of brain which controls breathing, heart rate and swallowing is:
A. Cerebrum
B. Cerebellum
C. Medulla
D. Hypothalamus

Q.10 Depolarization is due to:
A. Influx of K^+
B. Influx of Na^+
C. Efflux of K^+
D. Efflux of Na^+

Q.11 The chief structural and functional units of the nervous system are:
A. Neuroglia
B. Neurons
C. Dendrites
D. Nissl's granules

Q.12 The one which carries impulse towards cell body is called:
A. Axon
B. Myelin sheath
C. Dendron
D. Soma

Q.13 The ________ is located in an arc between the thalamus and cerebrum:
A. Hypothalamus
B. Limbic system
C. Hippocampus
D. Amygdala

Q.14 Which structures respond when they are stimulated by impulse coming through motor neuron?
A. Receptors
B. Responses
C. Effectors
D. Transduction

Q.15 In general, insulin depresses blood glycose level, in a variety of ways which include all of the following, EXCEPT:
A. By increasing glycogen synthesis
B. By increasing cell utilization of glucose
C. By conversion of glucose into lipid and protein
D. By conversion of glycogen into glucose

Q.16 Insulin is produced by:
A. α cells of Langerhans
B. β cells of Langerhans
C. Adrenal cortex
D. Hypothetic neurosecretory cells

Q.17 Cellular glucose uptake and utilization is enhanced by:
A. Insulin
B. Glucagon
C. ADH
D. Aldosterone

Q.18 The lack of vasopressin produces:
A. Diabetes insipidus
B. Diabetes mellitus
C. Antidiuresis
D. Conservation of water

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Q.19 Islets of Langerhans have a large number of ______ cells:
A. Alpha C. Gamma
B. Delta D. Beta

Q.20 Hypoglycemia may occur as a result of:
A. Excess of insulin C. Excess of cortisol
B. Excess of glucagon D. Excess of glucocorticoid

Q.21 Greek word, hormone means:
A. Exciting C. Exciting and setting in motion
B. Setting in motion D. Initiating

Q.22 Arousal of hunger is detected by the receptors present in the:
A. Gut wall C. Stomach wall
B. Intestinal wall D. Oral cavity

Q.23 Following parts of neuron are capable to regenerate, EXCEPT:
A. Axon C. Dendron
B. Dendrites D. Cell body

Q.24 They play a vital role in the nutrition of neurons and their protection by myelin sheath:
A. Neuroglia C. Sensory neurons
B. Interneurons D. Motor neurons

Q.25 The process conducting impulses away from cell body is termed as:
A. Myelin C. Axon
B. Soma D. Dendron

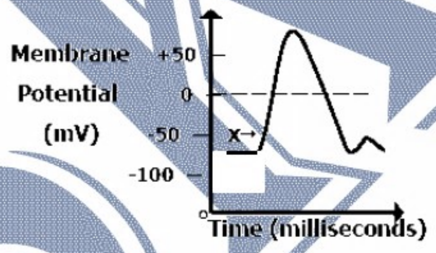
Q.26 Which of the following is a part of nervous as well as endocrine system?
A. Pons C. Pituitary
B. Cerebellum D. Hypothalamus

Q.27 Part of hind brain responsible for the balance and equilibrium of body is called:
A. Medulla C. Pons
B. Cerebellum D. Thalamus

Q.28 All are parts of forebrain, EXCEPT:
A. Thalamus C. Cerebrum
B. Limbic system D. Medulla

Q.29 Ganglia are the concentrations of _______ of neurons:
A. Axons C. Schwann cells
B. Dendrites D. Cell bodies

Q.30 In the following diagram of action potential in a neuron, 'x' depicts:



A. Hyperpolarization C. Repolarization
B. Polarization D. Depolarization

Q.31 Which structures detect changes in the external and internal environment of the animal?
A. Receptors C. Effectors
B. Responses D. Transduction

Q.32 White matter of spinal cord is made up of:
A. Motor nerve fibres C. Mixed nerve fibres
B. Sensory nerve fibres D. Myelinated nerve fibres

Q.33 Reflex movement of eyes is controlled by:
A. Hypothalamus C. Hindbrain
B. Forebrain D. Midbrain

Q.34 The CNS of man consists of:
A. Brain and PNS C. Receptors and effectors
B. Effectors and spinal cord D. Brain and spinal cord

Q.35 The hormone that antagonizes the action of insulin is:
A. ADH C. Aldosterone
B. Cortisol D. Vasopressin

Q.36 Which of the following is a relay centre connecting hind brain with the fore brain?
A. Medulla oblongata C. Hypothalamus
B. Reticular formation D. Thalamus

Q.37 It is the part of the hindbrain of vertebrates that controls automatic activities:
A. Medulla C. Cerebellum
B. Pons D. Cerebrum

Q.38 A receptor that responds to mechanical deformation, such as that caused by pressure, touch or vibration is called:

A. Chemoreceptor C. Photoreceptor
B. Mechanoreceptor D. Nociceptor

Q.39 These make up as much as half of nervous system:

A. Interneurons C. Motor neurons
B. Neuroglia D. Sensory neurons

Q.40 Respiratory center is located in:

A. Pons C. Medulla
B. Cerebellum D. Hypothalamus

Q.41 In which of the following neurons, the length of axon is greater than dendrites?

A. Motor C. Relay
B. Sensory D. Associative

Q.42 The number of cranial nerves in human is:

A. 31 pairs C. 62 pairs
B. 12 pairs D. 24 pairs

Q.43 Hind brain includes the medulla, pons and:

A. Cerebellum C. Reticular formation
B. Thalamus D. Cerebrum

Q.44 Very active sodium potassium pump is located in the cell membrane of:

A. Muscle cells C. Glial cells
B. Nerve cells D. Guard cells

Q.45 Cell bodies of _______ neuron are always located within CNS:

A. Motor C. Associative
B. Sensory D. Afferent

Q.46 Electromagnetic receptors are also called:

A. Undifferentiated receptors C. Photoreceptors
B. Mechanoreceptors D. Thermoreceptors

Q.47 Which one of the following pairs correctly matches a hormone with a disease resulting from its deficiency?

A. Insulin : Diabetes mellitus C. Glycogen : Cretinism
B. ADH : Rickets D. Vasopressin : Myxedema

Q.48 Which one of the following acts as chemical messenger?

A. Hormone C. Vitamin
B. Enzyme D. Lipid

Q.49 Chemoreceptors are found in:

A. Hypothalamus C. Eyes
B. Joints D. Ears

Q.50 The site of communication between nerve cells is:

A. Ganglion C. Cell body
B. Synapse D. Axon

Q.51 Taste buds are examples of:

A. Pressure receptors C. Photoreceptors
B. Thermoreceptors D. Chemoreceptors

Q.52 It contains auditory relay centre and centre that controls reflex movements of eyes:

A. Forebrain C. Spinal cord
B. Midbrain D. Hindbrain

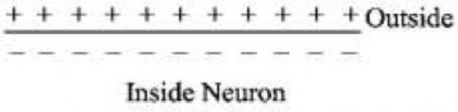
Q.53 In humans, the number of nerves which originate from spinal cord or lead to spinal cord is:

A. 12 C. 31
B. 24 D. 62

Q.54 Nerve impulse is carried across neuromuscular junction through:

A. Channels C. Neurotransmitters
B. Gates D. Receptors

Q.55 Which one of the following conditions best describes active membrane potential?

A)


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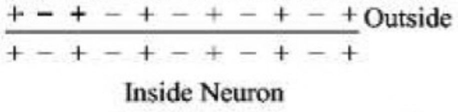

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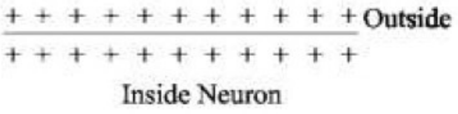

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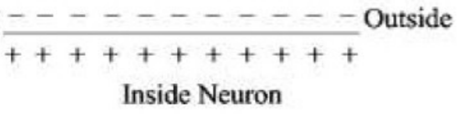

Q.56 It acts as a major coordinating centre controlling hunger, the menstrual cycle, water balance, the sleep-wake cycle etc.:

A. Hippocampus C. Hypothalamus
B. Thalamus D. Pons

Q.57 It plays an important role in the formation of long-term memory:
A. Thalamus
B. Hippocampus
C. Pons
D. Medulla

Q.58 The normal speed of nerve impulse in humans is ______ meters per second but maximum recorded is _____ meters per second:
A. 50, 100
B. 100, 120
C. 120, 200
D. 200, 250

Q.59 It is the centre for great many reflexes:
A. Hypothalamus
B. Thalamus
C. Spinal cord
D. Neurons

Q.60 Depolarization to repolarization of a cell membrane of neuron takes ______ milliseconds:
A. 1 – 2
B. 1 – 3
C. 2 – 3
D. 3 – 4

Q.61 A typical neuron at rest:
A. Is more positive outside than inside
B. Is more negative outside than inside
C. Has no charge on either side
D. Has an equal charge on either side

Q.62 It is the pathway of passage of impulse during reflex action:
A. Nerve impulse
B. Reflex arc
C. Synapse
D. Nerve tract

Q.63 Short term and quick coordination is called:
A. Nervous coordination
B. Hormonal coordination
C. Endocrinal coordination
D. Signal coordination

Q.64 It is best developed in the birds which are engaged in the complex activity of flight:
A. Cerebrum
B. Cerebellum
C. Thalamus
D. Hippocampus

Q.65 Potassium ions are ______ times more in concentration inside than outside:
A. Three
B. Five
C. Ten
D. Twenty

Q.66 The part of the brain which guides smooth and accurate motions and maintains body position is called:
A. Cerebrum
B. Cerebellum
C. Pons
D. Medulla

Q.67 Nerve impulse is carried across neuromuscular junction through:
A. Channels
B. Gates
C. Neurotransmitters
D. Receptors

Q.68 _______ respond directly to the level of blood glycose:
A. Thyroid gland
B. Parathyroids
C. Islets of Langerhans
D. Adrenal glands

Q.69 Insulin inhibits the hydrolysis of ______ in the liver and muscles:
A. Glycogen
B. Glucose
C. Lipid
D. Protein

Q.70 Which one of the following disorders indicates some hormonal deficiency?
A. Grave's disease
B. Diabetes mellitus
C. Exophthalmic goiter
D. Diabetes insipidus

Q.71 Glycogen is essentially antagonistic to:
A. Aldosterone
B. ADH
C. Insulin
D. Oxytocin

Q.72 Pick up the hormones which are polypeptides in nature:
A. Insulin and glucagon
B. ADH and oxytocin
C. Thyroxine, epinephrine and non-epinephrine
D. Testosterone and cortisol

Q.73 Pick up the one which antagonizes the action of calcitonin?
A. Aldosterone
B. Glucagon
C. Cortisol
D. Parathormone

Q.74 A sensory receptor that responds to smell is called:
A. Chemoreceptor
B. Mechanoreceptor
C. Photoreceptor
D. Thermoreceptor

Q.75 It also increases the rate of breakdown of fats:
A. Insulin
B. Aldosterone
C. Glucagon
D. Androgens

Q.76 Neurotransmitters are released from:
A. Axon endings
B. Dendrite endings
C. Synaptic membrane
D. Cell body

Q.77 Of the many kinds of ions present in the nerve cells and the surrounding fluid:

A. Sodium (Na^+) and potassium (K^+) ions are the most important
B. Sodium (Na^+) and organic ions are the most important
C. Organic ions and potassium (K^+) ions are the most important
D. Sodium (Na+) and chloride ions are the most important

Q.78 Which structure carries impulse towards cell body?

A. Myelin sheath
B. Axon
C. Soma
D. Dendron

Q.79 Homeostatic thermostat is located in the:

A. Pons
B. Cerebellum
C. Medulla
D. Hypothalamus

Q.80 Glands and muscles respond when they are stimulated by impulse coming via:

A. Associative neuron
B. Sensory neuron
C. Relay neuron
D. Motor neuron

Q.81 A chemical that is released by a nerve cell close to a second nerve cell, a muscle, or a gland cell and that influences the activity of the second cell is called:

A. Neurotransmitter
B. Enzymes
C. Metabolite
D. Tropic factor

Q.82 The cold receptors are nearly _______ more abundant than heat or temperature receptors:

A. 27 times
B. 10 times
C. 40 times
D. 80 times

Q.83 Spinal cord is protected by how many layers of meninges?

A. 2
B. 3
C. 4
D. 5

Q.84 Somatic nerves innervate the:

A. Smooth muscles
B. Skeletal muscles
C. Glands
D. Cardiac muscles

Q.85 Which of the following acts as relay neuron?

A. Sensory neuron
B. Inter neuron
C. Efferent neuron
D. Motor neuron

Q.86 Forebrain includes thalamus, the limbic system and the:

A. Cerebrum
B. Hypothalamus
C. Pons
D. Cerebellum

Q.87 A cell of the nervous system that provides support and insulation to neurons is called:

A. Neuron
B. Dendron
C. Axon
D. Glial cell

Q.88 These show response to stimuli of light:

A. Mechanoreceptors
B. Thermoreceptors
C. Photoreceptors
D. Chemoreceptors

Q.89 _______ is protein in nature:

A. Thyroxine
B. Oxytocin
C. Glucagon
D. Vasopressin

Q.90 All are parts of hind brain, EXCEPT:

A. Medulla
B. Pons
C. Cerebellum
D. Hypothalamus

Q.91 ________ consists of spiral and much twisted endings, each of which end in a knob:

A. Pacinian's corpuscles
B. Renal's corpuscles
C. Meissener's corpuscles
D. Neural's corpuscles

Q.92 Thalamus and cerebrum are the part of:

A. Fore brain
B. Mid brain
C. Hind brain
D. Spinal cord

Q.93 When your finger accidentally gets caught in a door, the pain message is sent to your brain through:

A. Homeostasis
B. Sensory receptors
C. The medulla
D. Effectors

Q.94 This makes the inside of neuron membrane more negative:

A. Large conc. of negative organic ions
B. Large conc. of positive organic ions
C. Small conc. of negative inorganic ions
D. Small conc. of positive inorganic ions

Q.95 By definition motor neurons connect:

A. Sensory organs with CNS
B. CNS with effectors
C. Sensory organ with effectors
D. Spinal with brain

Q.96 The main neurotransmitter for synapses is _______ which lie outside the central nervous system:

A. Choline
B. Acetylcholine
C. Acetaldehyde
D. Phosphatidylcholine

Q.97 It inhibits the digestion of food:
A. CNS
C. PNS
B. Sympathetic system
D. Parasympathetic system

Q.98 The reflex action is the phenomena which only involves:
A. Brain, receptors, spinal cord
C. Receptors, neurons, brain
B. Receptors, effectors and spinal cord
D. Receptors ad effectors

Q.99 In an action potential, the permeability of sodium ions in the neurons increases due to:
A. Repolarization
B. The opening of sodium channels/gates
C. The action of the acetylcholinesterase enzyme
D. Sodium ions forming an ionic bonding

Q.100 The passage of nerve impulse is associated with increase in permeability of:
A. K^+ ions
C. Na^+ ions
B. Cl^- ions
D. Organic ions

Q.101 In humans, nervous coordination is described by:
A. Reception of stimulus by receptors
B. Analysis of the stimulus by inter neurons
C. Generation of response by effectors
D. All A, B, C

Q.102 These are the structures which respond when they are stimulated by an impulse coming through motor neuron:
A. Glands
B. Thermo-receptors
C. Sensory neurons
D. Pacinian corpuscles

Q.103 In the skin, the receptors are concerned with the detection of at least:
A. Three different senses
B. Five different senses
C. Four different senses
D. Six different senses

Q.104 The chief structural and functional units of nervous system are:
A. Neurons
B. Microglia
C. Neuroglia
D. Schwann cells

Q.105 All of the following are important functions of neuroglia in CNS except:
A. Protection of neurons
B. Speed up impulse conduction
C. Division of nerve cells
D. Provide nutrition to neurons

Q.106 _______ of certain brain cells branch profusely, giving cell a tree-like appearance.
A. Myelin sheath
B. Axon
C. Dendron
D. Dendrites

Q.107 The fiber of sensory neuron between dorsal root ganglion and peripheral receptors is:
A. Axon
B. Dendrites
C. Dendron
D. Cell body

Q.108 Cluster of ribosomes associated with RER and present inside the cell body of neurons is specifically called:
A. Axolemma
B. Neurofibrils
C. Nissl's granules
D. Polysomes

Q.109 Identify the correct option with respect to the direction of conduction of nerve impulses by the following protoplasmic processes of neurons:

	Dendron	Axon
A.	Away from cell body	Away from cell body
B.	Towards cell body	Away from cell body
C.	Towards cell body	Towards cell body
D.	Away from cell body	Towards cell body

Q.110 While responding to stimulus, motor neurons give signals to:
A. Receptors
B. Effectors
C. Afferent neurons
D. Relay neurons

Q.111 In dorsal root ganglion, cell bodies of _________neurons are present.
A. Sensory
B. Intermediate
C. Motor
D. Relay

Q.112 Identify the correct sequence of structures involved in a reflex circuit:
A. Receptor → Motor neuron → Associative neuron → Gland → Sensory neuron
B. Receptor → Motor neuron → Sensory neuron → Muscle → Associative neuron
C. Receptor → Sensory neuron → Associative neuron → Motor neuron → Effectors
D. Motor neuron → Associative neuron → Effectors → Sensory neuron → Muscle

Q.113 Resting membrane potential is actively maintained by protein pumps which utilize ATPs for:
A. Na^+ influx and K^+ efflux
B. Na^+ efflux and K^+ influx
C. Na^+ and K^+ influx
D. Na^+ and K^+ efflux

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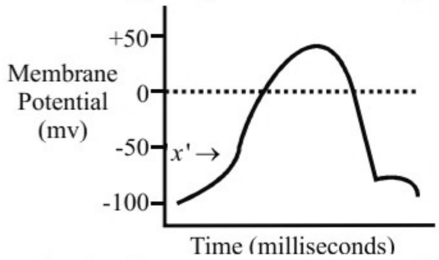
Q.114 The correct sequence for depolarization and repolarization is:

1. **Stimulus applied at a site on polarized membrane**
2. **Increased permeability for Na^+**
3. **Generation of action potential**
4. **Increased permeability for K^+**
5. **Restoration of membrane potential**

A. 1 → 2 → 3 → 4 → 5
B. 1 → 4 → 3 → 2 → 5
C. 2 → 1 → 3 → 4 → 5
D. 1 → 2 → 4 → 3 → 5

Q.115 In the following diagram of action potential in a neuron, "x" depicts:



A. Depolarization
B. Repolarization
C. Polarization
D. Hyperpolarization

Q.116 Each neuron is separated from the next by a small gap called:

A. Gap junction
B. Synaptic cleft
C. Synaptic gutter
D. Neural gap

Q.117 Which of the following is incorrect about synaptic transmission?

A. Fusion of synaptic vesicles with pre-synaptic membrane
B. Release of neurotransmitter molecules into synaptic cleft
C. Binding of neurotransmitter molecules with receptor located on pre-synaptic membrane
D. Change in permeability of post-synaptic membrane for ions

Q.118 Nervous system in humans is:

A. Dorsal and rigid
B. Dorsal, hollow and diffused
C. Ventral and primitive
D. Dorsal, hollow and central

Q.119 Cerebral hemispheres communicate with each other through corpus callosum that is a band of:

A. Dendrites
B. Axons
C. Dendrons
D. Nerves

Q.120 The primary function of spinal cord is to:

A. Produce CSF
B. Produce hormones
C. Communicate two hemispheres
D. Communicate brain with rest of body

Q.121 These contain cell bodies of neurons:

A. Gray and white matter
B. Ganglia and gray matter
C. Nerve and ganglia
D. Nerve and white matter

Q.122 Medulla oblongata is located:

A. In front of Cerebrum, below midbrain
B. In front of cerebellum, above pons
C. Between spinal cord and pons
D. In front of pons, above cerebellum

Q.123 Sensory division of peripheral nervous system communicates between:

A. Receptors and CNS
B. Effectors and CNS
C. Receptors and effectors
D. CNS and muscles

Q.124 All of the following body functions are controlled by ANS except:

A. Limb movement
B. Glandular secretions
C. Digestion in stomach
D. Blood pressure

Q.125 Stimulation of vagus nerve will cause:

A. Increased blood pressure
B. Decreased heart rate
C. Increased blood flow to limbs
D. Dilation of pupil

Q.126 Peripheral nervous system is further divided into:

A. Motor and sensory divisions
B. Sympathetic and parasympathetic systems
C. Autonomic and somatic divisions
D. Spinal cord and brain

Q.127 The part of the brain which guides smooth and accurate motions and maintains body position is called:

A. Cerebrum
B. Pons
C. Cerebellum
D. Medulla

Q.128 It controls rate and pattern of breathing:

A. Pons
B. Cerebrum
C. Medulla
D. Cerebellum

Q.129 It is true about thalamus:

A. Crucial motor relay center
B. Present in ventricles
C. Part of limbic system
D. Sensory relay center

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Q.130 All spinal nerves are:
A. Motor nerves only B. Mixed nerves only
C. Sensory nerves only D. Motor, sensory and mixed

Q.131 Parkinson's disease is believed to be caused by cell death in a brain area that produces:
A. Acetylcholine B. Dopamine
C. Serotonin D. Epinephrine

Q.132 Doctor, during examining the epilepsy patients performs electroencephalography. During this process, membrane potential that spreads on/across ____________ is recorded.
A. Cristae B. Cisternae
C. Neurolemma D. Sarcolemma

Q.133 Which of the following is false about hormones?
A. Transported through blood
B. Released by ductless gland
C. Responsible for long term regulatory changes
D. Initiate new biochemical reaction

Q.134 Find out the mismatched pair from the given options:
A. Glucagon - Protein B. ADH - Amino acid derivative
C. Oxytocin - Polypeptide D. Cortisone - Steroid

Q.135 SRF is produced by ______________ and acts on ______________.
A. Anterior pituitary, hypothalamus B. Hypothalamus, anterior pituitary
C. Post pituitary, hypothalamus D. Anterior pituitary, bone cells

Q.136 ADH secretion is stimulated by decrease in blood pressure and blood volume which is detected by osmo-receptors in:
A. Kidneys B. Cerebral cortex
C. Posterior pituitary D. Hypothalamus

Q.137 Gastrin is produced by mucosa of the pyloric region of stomach under the influence of:
A. Vitamin rich food B. Lipid rich food
C. Protein rich food D. Carbohydrate rich food

Q.138 All of the following cause increase in secretion of MSH and darkening of skin except:
A. Excess light B. Addison's disease
C. Pregnancy D. Cushing disease

Q.139 Hormones that share a common hypothalamic releasing factor:
A. ACTH, FSH B. FSH, LTH
C. ACTH, ICSH D. FSH, LH

Q.140 It is caused due to the production of an abnormal body protein which continuously stimulates the thyroid to produce its secretion in excess:
A. Myxoedema B. Grave's disease
C. Cretinism D. Addison's disease

Q.141 Excess or deficiency of ACTH will effect functioning of:
A. Hypothalamus B. Adrenal cortex
C. Anterior pituitary D. Adrenal medulla

Q.142 Which of the following hormone depresses blood glucose level?
A. Insulin B. Cortisol
C. Glucagon D. Calcitonin

Q.143 Over-secretion of growth hormone in child leads to:
A. Dwarfism B. Gigantism
C. Cretinism D. Tetany

Q.144 All are symptoms of diabetes mellitus except:
A. Accumulation of toxic metabolites from fats
B. Derangement of nervous system
C. Body becomes dehydrated
D. Decreased blood glucose level

Q.145 A larger quantity of dilute urine is produced in diabetes insipidus. This disease is due to the deficiency of:
A. Antidiuretic hormone B. Thyroxin
C. Aldosterone D. Cortisol

Q.146 Which one is used as messenger in both nervous and hormonal coordination?
A. Adrenaline B. Oxytocin
C. Acetylcholine D. Nicotine

Q.147 A male body tends more towards the form of immature female after:
A. Spermiogenesis B. Castration
C. Deficiency of dopamine D. Hypergonadism

Q.148 Which hormone increases calcium level in the blood?
A. Calcitonin B. Parathormone
C. Cortisol D. Thyroxin

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Q.149 Which of the following will prevent ovulation during pregnancy?
A. FSH
B. Estrogen
C. LH
D. Progesterone

Q.150 Testosterone is produced by:
A. Sertoli cells
B. Interstitial cells
C. Germinal epithelium
D. Spermatogonia

Q.151 It dilates blood vessels in certain parts of body:
A. Insulin
B. Noradrenaline
C. Adrenaline
D. Thyroxin

Q.152 Acetylcholine from pre-synaptic fibre is released into extracellular fluid; it is concerned with:
A. Release of Na$^+$
B. Release of K$^+$
C. Release of Ca^{++}
D. Release of Mg^{++}

Q.153 Which part of limbic system is involved in long-term memory?
A. Amygdala
B. Hypothalamus
C. Hippocampus
D. Thalamus

Q.154 Find the odd one out regarding the components of reflex.
A. Afferent nerve
B. Effectors
C. Efferent nerve
D. Brain

Q.155 Depolarized state lasts for_____ till Na$^+$ channels are not closed.
A. 1 millisecond
B. 10 milliseconds
C. 100 milliseconds
D. 1000 Millisecond

Q.156 When synaptic vesicles become fused with pre-synaptic membrane:
A. Potassium ions are released
B. Neurotransmitters are released
C. Calcium ions are released
D. Both B and C

Q.157 Cranial and spinal nerves are included in:
A. Central nervous system
B. Brain
C. Peripheral nervous system
D. All of these

Q.158 Which function(s) is related to neuron?
I) Detection **II) Integration** **III) Command**
A. I only
B. II only
C. III only
D. I, II and III

Q.159 In resting condition, the potential is negative inside and positive outside, the measurement would be:
A. –70 Mv
B. 70 mV
C. 50 mV
D. –50 Mv

Q.160 Depolarization is an important phase in nerve impulse; it happens because of:
A. Influx of K$^+$
B. Efflux of K$^+$
C. Influx of Na$^+$
D. Efflux of Na$^+$

Q.161 The screening of sensory information occurs before it reaches to motor cortex; this is done by:
A. Midbrain
B. Thalamus
C. Reticular formation
D. Cerebellum

Q.162 The thinking and reasoning processes are regulated/controlled in which part of brain?
A. Forebrain
B. Hindbrain
C. Cerebellum
D. Midbrain

Q.163 Efferent neurons are:
A. Motor neurons
B. Associative neurons
C. Sensory neurons
D. Mixed neurons

Q.164 Neurotransmitters are:
A. Chemical catalysts of nervous system
B. Chemical messengers of nervous system
C. Found in nucleus of neuron
D. All of these

Q.165 Find the true statement(s) about human brain.
I. Cerebellum is the middle portion of the brain.
II. Cerebrum is the posterior most portion of the brain.
III. Medulla oblongata is the posterior most portion of the brain.
A. I only
B. II only
C. III only
D. I, II and III

Q.166 The function of midbrain function(s) is/are:
A. Coordination and relay of visual information
B. Coordination and relay of odour information
C. Both of these
D. None of these

SKN

Q.167 Find the correct pathway of reflex arc.

A. Step on sharp object → Sensory nerve → Medulla → Motor nerve → Foot muscle
B. Step on sharp object → Sensory nerve → Spinal cord → Motor nerve → Foot muscles
C. Step on sharp object → Sensory nerve → Cerebrum → Motor nerve → Foot muscles
D. Step on sharp object → Sensory nerve → Cerebellum → Motor nerve → Foot muscle

Q.168 During nerve impulse, if outer surface is more positive than inner surface, the stage is:

A. Active membrane potential B. Resting membrane potential
C. Action potential D. Membrane potential

Q.169 Brain is protected by coverings known as:

A. Ventricles B. Pleurae
C. Meninges D. A and C

Q.170 Corpus callosum connect:

A. Two spinal nerves B. Two cerebral hemispheres
C. Medulla oblongata to spinal cord D. Mid brain to fore-brain

Q.171 When 2K$^+$ are transported actively inward:

A. The number of Na$^+$ transported outward is 1
B. The number of Na$^+$ transported outward is 2
C. The number of Na$^+$ transported outward is 3
D. The number of Na$^+$ transported outward is 5

Q.172 What is true about thalamus?

I. It is a relay station between body and cerebrum.
II. It is a relay station between spinal cord and brain.
III. It is a relay station between body and spinal cord.

A. I only B. II only
C. III only D. II and III

Q.173 All of the following are controlled by medulla oblongata except:

1. Breathing **2. Blood pressure**
3. Swallowing **4. Facial expressions**

A. 1 and 2 B. 2 and 3
C. 1, 2 and 3 D. 4

Q.174 Neurotransmitters fuse with post-synaptic membrane which __________.

A. Open channels for Na$^+$ ions B. Open channels for Ca$^+$ ions
C. Open channels for Cl^{++} ions D. All of these

Q.175 The smooth and accurate movement is related to:

A. Thalamus B. Hypothalamus
C. Medulla oblongata D. Cerebellum

Q.176 Viscera and smooth muscles are innervated by:

A. Somatic nervous system B. Autonomic nervous system
C. Central nervous system D. None of these

Q.177 After the depolarization of post-synaptic neurolemma:

1. Neurotransmitters are generally taken up by Schwann cells.
2. Neurotransmitters are mostly laid in synaptic cleft.
3. Neurotransmitters are mostly degraded by enzymes.

A. 1 only B. 2 only
C. 3 only D. Either 1, 2 or 3

Q.178 Hyperpolarization across neurolemma occurs due to:

A. Outward diffusion of Na$^+$ B. Late closing of K$^+$ channels
C. Influx of Na$^+$ D. Distribution of charge

Q.179 The original ion gradients and RMP after hyperpolarization in neurons are restored by:

A. Na$^+$ channels B. K$^+$ channels
C. Na$^+$ /K$^+$ pump D. Ca^{++} channels

Q.180 Velocity of impulse in axon fibre depends upon diameter, length and myelin sheath. Find the true statement(s).

1. Smaller and thicker the axon, faster it transmits information.
2. Unmyelinated axon transmits information slower than myelinated neuron.
3. Larger and thinner the axon, faster it transmits information.

A. 1 only B. 2 only
C. 1 and 3 D. 1, 2 and 3

Q.181 Identify the type of neuron. : 1 axon, Several dendrites

A. Unipolar neuron B. Bipolar neuron
C. Multipolar neuron D. Either A or B

Q.182 Which of the following acts as a messenger in both chemical and nervous coordination?

A. Acetylcholine B. GABA
C. Endorphins D. None of these

Q.183 Parasympathetic nervous system is related to all of the following except:
I. Promotion of peristalsis and digestion
II. Dilation of pupil
III. Slow heart beat
A. I only B. II only
C. III only D. I, II and III

Q.184 Due to diffusion of Na^+, membrane potential from -70mV towards 0 and then __________.
A. Reaches to 50 Mv B. Reaches to -50 mV
C. Reaches to 70 mV D. Reaches to –70 mV

Q.185 A wave of electrochemical change which travels along length of neuron is termed as:
A. Reflex arc B. Nerve impulse
C. Threshold potential D. None of these

Q.186 What happens when depolarization of post-synaptic membrane happens?
A. Action potential is inhibited B. Vesicle's fuse with pre-synaptic membrane
C. Action potential is generated D. Neurotransmitters are released into synaptic cleft

Q.187 More K^+ ions on the outside than Na^+ ions on the inside; the condition seems to be:
A. Depolarization B. Resting membrane potential
C. Refractory period D. None of these

Q.188 Active membrane potential is characterized by:
A. More negative inside of neuron than outside.
B. More positive inside of neuron than outside.
C. Same concentration of Na^+ and K^+ on both inside and outside of neuron.
D. None of these

Q.189 The state of resting membrane potential is also called:
A. Membrane potential B. Resting membrane potential
C. Action potential D. Polarized state

Q.190 Voluntary muscles are regulated by:
A. Somatic nervous system B. Parasympathetic nervous system
C. Autonomic nervous system D. Sympathetic nervous system

Q.191 Concentration of K^+ is ________in the fluid inside the cell than outside.
A. 10 times greater B. 20 times greater
C. 30 times greater D. 40 times greater

Q.192 Axon conducts action potential from neuron cell body to:
A. Post-synaptic terminal B. Pre-synaptic terminal
C. Nissl's granules D. All of these

Q.193 Identify the neuroglial cell(s).
A. Node of Ranvier B. Schwann cell
C. Nissl's granules D. All of these

Q.194 The neuron which carries impulse from CNS:
A. To effectors are sensory neurons B. To PNS are sensory neurons
C. To effectors are motor neurons D. None of these

Q.195 The expanded tips of pre-synaptic neurons are known as:
A. Synaptic knob B. Calcium channels
C. Synoptic vesicles D. All of these

Q.196 All of the following in cytoplasm of neuron make it more negative except:
A. Sodium ions B. Amino acids
C. RNA D. All of these make cytoplasm negative

Q.197 The period of recovery of nerve fiber is called:
A. Spike potential B. Depolarization
C. Repolarization D. Refractory period

Q.198 The sub-divisions of fore-brain are:
A. Telencephalon and diencephalon B. Pineal gland and cerebrum
C. Telencephalon and cerebrum D. Pineal gland and diencephalon

Q.199 Which one of the following is considered as the 2nd largest part of brain?
A. Cerebellum B. Cerebrum
C. Medulla oblongata D. Hypothalamus

Q.200 All of the following are the components of reflex except:
A. Afferent nerve B. Efferent nerve
C. Brain D. Effectors

Q.201 Which type of nervous system prepares body for highly energetic activity?
A. Somatic nervous system B. Parasympathetic nervous system
C. Sympathetic nervous system D. All of these

Q.202 Dorsal root of a spinal nerve contains:
A. Motor nerve fibers B. Sensory nerve fibres
C. Both A and B D. Interneurons

SKN

Q.203 The part of human brain that regulates anterior pituitary gland is:
A. Hypothalamus B. Cerebrum
C. Thalamus D. None of these

Q.204 All of the following are the components of brainstem except:
A. Hind brain
B. Pons
C. Medulla oblongata
D. None, as A, B and C are the parts of brainstem

Q.205 Neurotransmitter molecule binds to receptors that are:
A. Situated on synaptic knob B. Situated on pre-synaptic membrane
C. Situated on post-synaptic membrane D. Situated on synaptic cleft

Q.206 Monosynaptic reflex is represented in which option?
A. Knee-jerk B. Withdrawal of hand from hot object
C. Heart rate D. A and B

Q.207 Cytoplasm of neuron is characterized by presence of:
A. Node of Ranvier B. Schwann cell
C. Nissl's granules D. Calcium channels

Q.208 Someone feels calm down:
A. If sympathetic nervous system is activated.
B. If parasympathetic nervous system is activated.
C. If somatic nervous system is activated.
D. If white matter of spinal cord is activated.

Q.209 Synaptic knobs contain:
A. Ribosomes and RER B. Nissl's substances
C. Synaptic vesicles D. All of these

Q.210 Refractory period lasts for:
A. 4 seconds B. 5 seconds
C. 1 second D. None of these

Q.211 Active membrane potential is also called as:
A. Repolarization B. RMP
C. Action potential D. Hyperpolarization

Q.212 In neurolemma, when sodium-potassium pump operates:
A. Two K^+ ions are actively transported out of neuron.
B. Three K^+ ions are actively transported inside of neuron.
C. Two Na^+ ions are actively transported out of neuron.
D. Three Na^+ ions are actively transported out of neuron.

Q.213 Stimulus capable of producing action potential is known as:
A. Threshold stimulus B. RMP
C. Active membrane potential D. Repolarization

Q.214 What is/are function(s) of dendrites?
1. To conduct impulses to cell body.
2. To receive stimuli.
3. To conduct action potential from soma to pre-synaptic terminals.
A. 1 only B. 2 only
C. 1 and 2 D. 1, 2 and 3

Q.215 A typical reflex arc involves how many components?
A. 6 components B. 5 components
C. 4 components D. 3 components

Q.216 To support, protect and nourish the neuron; these functions are related to:
A. Nissl's granules B. Node of Ranvier
C. Nerve cell D. Glial cell

Q.217 When a neuron is stimulated by a threshold stimulus:
A. It causes opening of K^+ gates.
B. It causes opening of Na^+ gates.
C. It causes opening of Na^+ and K gates.
D. It causes opening of K^+ gates and closing of Na^+ gates.

Q.218 During the mechanism of synaptic transmission, depolarization brings membrane potential towards threshold level, it is called as:
A. EPSP B. RMP
C. AMP D. Synaptic delay

Q.219 The role of Schwann cell in neurotransmission is/are:
I. Insulation
II. Protection from injury
III. Increase the speed of action potential
A. I only B. II only
C. III only D. I, II and III

Q.220 During action potential, the opening of voltage-gated potential K+ channels in neurolemma results in:
A. Repolarization of neurolemma B. Depolarization of neurolemma
C. Release of neurotransmitters D. B and C

Q.221 The neurotransmitter that is involved during inhibitory synaptic transmission is:
A. Serotonin B. Acetylcholine
C. Glycine D. None of these

Q.222 During saltatory conduction, a nerve impulse jumps:
A. From one node of myelin sheath to another B. From one node of Ranvier to another
C. From one synapse to another D. None of these

Q.223 Which neurotransmitter is hydrolyzed by monoamine oxidase?
A. Acetylcholine B. Adrenaline
C. Both A and B D. None of these

Q.224 The path of nerve impulse during reflex action is known as:
A. Active membrane potential B. Depolarization
C. Reflex arc D. All of these

Q.225 Pick up an amino acid derivative hormone:
A. Prolactin C. Thyroxin
B. Estrogen D. Oxytocin

Q.226 Identify endocrine gland:
A. Salivary gland C. Adrenal gland
B. Sweat gland D. Pancreas

Q.227 High calcium in the body fluid may be the cause of:
A. Tetany C. Anemia
B. Kidney stones D. Goiter

Q.228 Endocrine system consists of:
A. 10 endocrine glands C. 15 endocrine glands
B. 20 endocrine glands D. 25 endocrine glands

Q.229 Oxytocin production during labor and suckling by baby is an example of:
A. Negative feedback mechanism C. Feedback inhibition
B. Precursor activation D. Positive feedback mechanism

Q.230 Which lobe of pituitary gland is called master gland?
A. Anterior C. Posterior
B. Middle D. Lateral

Q.231 It is characterized by enlarging the hands, feet, skull, nose and jaw bone:
A. Dwarfism C. Gigantism
B. Acromegaly D. Myxedema

Q.232 Calcitonin is secreted by:
A. Pituitary gland C. Adrenal gland
B. Parathyroid gland D. Thyroid gland

Q.233 It inhibits the hydrolysis of glycogen in the liver and the muscles:
A. Glucagon C. Cortisol
B. Insulin D. Aldosterone

Q.234 In male, luteinizing hormone is also called:
A. FSH C. LTH
B. ICSH D. LH

Q.235 Failure to produce insulin leads to a condition called:
A. Diabetes insipidus C. Addison's disease
B. Diabetes mellitus D. Cushing's disease

Q.236 Which one of the following is not involved in sugar metabolism?
A. Insulin C. Cortisone
B. Glucagon D. Aldosterone

Q.237 Insulin and glucagon are ______ in nature:
A. Steroids C. Proteins
B. Amino acid derivatives D. Polypeptides

Q.238 In mammals it consists of two lobes situated below the larynx:
A. Adrenal gland C. Parathyroid gland
B. Thyroid gland D. Prostate gland

Q.239 Calcitonin is antagonistic to:
A. Thyroxine C. Parathormone
B. Calcitonin D. Insulin

Q.240 It is believed that oxytocin and ADH are produced in _________ and travel down the nerves to the posterior lobe of pituitary to be stored:
A. Hypothalamus C. Adrenal gland
B. Pituitary gland D. Thyroid gland

Q.241 Development of secondary male characteristics is caused by:
A. Androgens C. Corticosterones
B. Aldosterone D. Cortisol

Q.242 Decrease in blood pressure, blood volume, and osmotic pressure of the blood causes the secretion of:
A. MSH C. ADH
B. Oxytocin D. TSH

Q.243 _________ and __________ are secreted in stress situations:
A. Aldosterone, corticosterone C. Glucocorticoid, mineralocorticoid
B. Androgen, aldosterone D. Adrenaline, nor-adrenaline

Q.244 Beta cells of pancreas secrete:
A. Insulin C. Glucagon
B. ADH D. Aldosterone

_________ produced by the ruptured follicle in response to LH:
A. Estrogens C. Oxytocin
B. Progesterone D. FSH

Q.245 Too much cortical hormones are produced in:
A. Grave's disease C. Addison's disease
B. Parkinson's disease D. Cushing's disease

Q.246 A hormone, secreted by the pineal gland, that is involved in the regulation of circadian cycles is called:
A. Adrenaline C. Insulin
B. Melatonin D. Epinephrine

Q.247 Which part of neuron may act as receptor as well?
A. Dendrite B. Cell body
C. Axon D. Ganglion

Q.248 __________ receives and processes sensory information, initiates responses, store memories, generates thoughts and emotions.
A. Nerves B. Spinal cord
C. Brain D. Ganglia

Q.249 The pupil dilation is under the control of:
A. Central nervous system B. Parasympathetic nervous system
C. Peripheral nervous system D. Sympathetic nervous system

Q.250 Grey matter is composed of:
A. Schwann cells B.Myelinated fibres
C. Cell bodies of neuron D. Nissl's granules

Q.251 Which of the following neurotransmitter is related only to CNS?
A. Epinephrine B. Adrenaline
C. Acetylcholine D. Dopamine

Q.252 The type of receptors present in the hypothalamus are:
A. Mechanoreceptors B. Chemoreceptors
C. Photoreceptors D. Pressure receptors

Q.253 Part of motor neuron which makes synapse with sarcolemma is:
A. Motor unit B. Axon
C. Dendron D. Dendron and axon

Q.254 It is not true about cell body of neuron:
A. Main nutritional part B. It contains axoplasm
C. Biosynthesis of materials D. Regenerate axonal and dendrite fibre

Q.255 It carries sensory information to limbic system and cerebral cortex:
A. Thalamus B. Medulla
C. Pons D. Cerebellum

Q.256 Blinking of eyes, which is an example of reflex action, is controlled by:
A.CNS B. Spinal cord
C.PNS D. Brain

Q.257 The nerves are:
A. The bundles of axons bounded by connective tissues
B. The bundles of axons or dendrites bounded by connective tissues
C. The bundles of dendrites bounded by connective tissues
D. The bundles of cell bodies bounded by connective tissues

Q.258 Optic nerve is the part of:
A. Central nervous system B. Spinal nerves
C. Peripheral nervous system D. Somatic nerves

Q.259 Which of the following will probably absent in a neuron?
A. Centrosome B.Neurofibrils
C. Mitochondria D. Microtubules

Q.260 Which of the following membrane potential depicts hyperpolarization?
A. +70mV B. -90mV
C. +50mV D. -70mV

Q.261 Pick the odd one out:
A. Parkinson's disease B. Epilepsy
C. Alzheimer's disease D. Graves' disease

Q.262 Which is true about hormones?
A. Exocrine and endocrine secretion B. Start chemical reactions
C. Chemically of inorganic nature D. Produced in very small amount

Q.263 The releasing hormones are produced by:
A. Pineal gland B. Pituitary gland
C. Pancreas D. Hypothalamus

Q.264 The male sex hormone is:
A. ICSH B. FSH
C. Gonadotropic hormone D. Testosterone

Q.265 Dwarfism is a hormonal disorder due to:
A. Deficiency of thyroxin B. Deficiency of STH
C. Excess of thyroxin D. Deficiency of insulin

Q.266 Deficiency of the adrenal cortex activity leads to:
A. Cushing's disease B. Addison's disease
C. Grave's disease D. Cretinism

Q.267 A patient who excretes large quantity of sodium in urine has:
A. Diseased adrenal medulla B. Diseased pancreas
C. Diseased adrenal cortex D. Diseased thymus

Q.268 Besides testes, androgens are also produced by:
A. Thyroid B. Adrenal medulla
C. Thymus D. Adrenal cortex

Q.269 Which is not a ductless gland?
A. Testis B. Sub-maxillary
C. Ovary D. Parathyroid

Q.270 Pick the gland that have both exocrine and as well as endocrine cells:
A. Pituitary B. Pancreas
C. Hypothalamus D. Adrenal

Q.271 Milk production is the function of:
A. Oxytocin B. Prolactin
C. ADH D. LH

Q.272 Cholesterol serves as precursor of:
A. Proteins hormones B. Steroid hormones
C. Adenoid hormones D. Glucoid hormones

Q.273 Receptors for hearing come under heading of:
A. Chemoreceptors C. Mechanoreceptors
B. Photoreceptors D. Thermoreceptors

Q.274 Myelin sheath surrounding neuron fibers is made of:
A. Carbohydrates B. Lipids
C. Proteins D. Lipoprotein

Q.275 Coordination results in;
A. Regulation of body functions C. Organization of body functions
B. Integration of body functions D. All of these.

Q.276 Coordination in man is brought about by:
A. Nervous system C. Both a & b
B. Endocrine glands D. None of these

Q.277 Which of the following is present inside the vertebral column?
A. Brain B. Spinal cord
C. Both a &b D. None of these

Q.278 A reflex arc involves:
A. Sensory neuron C. Motor neuron
B. Associative neuron D. All of above

Q.279 The axon conducts nerve impulse _________ the cell body.
A. Away from B. Around
C. Toward D. Only inside

Q.280 The part of brain plays important role in the formation of long-term memory
A. Amygdala B. Hippocampus
C. Thalamus D. Pons

Q.281 Which of the following is NOT true of myelin?
A. It is formed by Schwann cells C. It allows impulses travel faster
B. It prevents from pathogens D. It makes the impulse jump

Q.282 What does glucagon do?
A. Assists in digestion within the stomach
B. Helps central water secretion and absorption from the intestines
C. Assist insulin in regulating blood (Sugar) in hormonal range
D. increase sugar level in blood

Q.283 The hormones composed of amino acids is
A. Oestrogen
B. Cortisone
C. Thyroxin
D. Insulin

Q.284 Hormones
A. Act as coenzyme
C. Act as enzyme
B. Influence synthesis
D. Regulate metabolic reaction

Q.285 The cell body or soma is main __________ part of the nerve cell
A. Functional
B. Nutritional
C. Structural
D. Active

Q.286 Which is the center of reflex movements related to eyes
A. Midbrain
B. Cerebellum
C. Pons
D. Thalamus

Q.287 A nerve is a:
A. collection of neurons
B. Concentration of dentrites of neurons
C. Bundles of axons or dentrites of neorons
D. Bundles of axons or dentrites of neurons bounded by connective tissue

Q.288 Which is not related to others?
A. Cretinism
B. Exophthalmic
C. Myxedema
D. Diabetes mellitus

Q.289 Resting membrane potential is
A. -0.07 volts
B. -0.70 volts
C. -0.007 volts
D. +0.007 volts

Q.290 Which of the following system relays impulse from CNS to skeletal muscles?
A. Somatic neural system
C. Parasympathetic neural system
B. Sympathetic neural system
D. Autonomic neural system

Q.291 Neuron is a _______ structure composed of three major parts cell body _____ and axon.
A. Macroscopic, dendrites
C. Microscopic, cyton
B. Microscopic, dendrites
D. Microscopic, soma

Q.292 When a neuron is in a resting state, i.e., not conducting any impulse, the axonal membrane is
A. Equally permeable to both Na$^+$ and K$^+$ ions.
B. Impermeable to both Na$^+$ and K$^+$ ions.
C. Comparatively more permeable to K$^+$ ions and nearly impermeable to Na$^+$ ions.
D. Comparatively more permeable to Na$^+$ ions and nearly impermeable to K$^+$ ions.

Q.293 The potential difference across resting membrane is negatively charged. This is due to differential distribution of the following ions.
A. Na$^+$ and K$^+$ ions
C. CO^{++} and Cl$^-$ ions
B. Ca^{++} and Mg^{++} ions
D. Ca^{++} and Cl$^-$ ions

Q.294 Which of the following prevents the fall of fruits?
A. GA3
B. NAA
C. Ethylene
D. Zeatin (Cytokinin)

Q.295 Which of the following hormones can replace vernalisation?
A. Ethylene
B. Cytokinins
C. Gibberellins
D. Auxins

Q.296 Some of the growth regulators affect stomatal opening. Closure of stomata is brought about by
A. Abscisic acid
B. Gibberellic acid
C. Auxin
D. Indole butyric acid

Q.297 In spinal cord of humans, the grey matter is _________ shaped.
A. Circular
B. Irregular
C. Butterfly
D. Longitudinal

Q.298 Resting axonal membrane is
A. Unpolarized
C. Unpolarized and more permeable to K$^+$
B. Polarized and more permeable to Na$^+$
D. Polarized and more permeable to K$^+$

Q.299 Right and left cerebral hemispheres are connected via
A. Corpus striatum
B. Corpus callosum
C. Thalamus
D. Hippocampus

Q.300 Forebrain consist of
A. Cerebrum
B. Thalamus
C. Hypothalamus
D. All of these

Q.301 The major coordinating centre for sensory and motor signaling is
A. Thalamus B. Hypothalamus
C. Medulla D. Pons

Q.302 Which one of the following is a naturally occurring growth inhibitor?
A. IAA B. NAA
C. ABA D. GA

Q.303 Hormone responsible for senescence
A. ABA B. GA
C. Auxin D. Cytokinin

Q.304 Which of the following plant hormone substitutes for long photoperiod in flowering plants?
A. Auxin B. Cytokinin
C. Gibberellin D. Ethylene

Q.305 Which of the following is responsible for apical dominance?
A. GA3 B. ABA
C. IAA D. Florigen

Q.306 Auxin inhibits the growth of
A. Apical buds C. Lateral axillary buds
B. Parthenocarpic development of fruits D. Roots of cuttings

Q.307 Hypothalamus contain the brain centre which controls the
A. Body temperature C. Urge for eating
B. Urge for drinking D. All of these

Q.308 Which of the following is true about hypothalamus?
A. Situated at the base of thalamus C. It contains the centre for thermoregulation
B. Contains neurosecretory cell D. All of these

Q.309 The part of brain located between the thalamus, hypothalamus of forebrain and pons is known as
A. Mid – brain B. Hind – brain
C. Limbic system D. All of these

Q.310 Chemicals called _____ are involved in the transmission of impulses at chemical synapse.
A. Neurohormones C. Receptors
B. Neurotransmitters D. Interferon

Q.311 Na / K pumps transports
A. $3Na^+$ out for $2K^+$ in C. $3Na^+$ in for $2K^+$ out
B. $2Na^+$ out for $3K^+$ in D. $2Na^+$ in for $3K^+$ out

Q.312 Which of the following is true about neural membrane?
A. Different of ion channels present.
B. Ion channels are selectively permeable.
C. Impermeable to negatively charged protein present in axoplasm.
D. All the above

Q.313 Depolarization occurs due to
A. Influx of Na^+ B. Efflux of Na^+
C. Influx of K^+ D. Efflux of K^+

Q.314 Unidirectional transmission of the nerve impulse is maintained by
A. Interneurons B. Synapse
C. Myelin sheath D. Membrane polarity

Q.315 In reflex action, the reflex arc is formed by
A. Muscle, receptor, brain C. Brain, spinal cord, muscle
B. Receptor, spinal cord, muscle D. Receptor, muscle, spinal cord

Q.316 Which of the following PGR is widely used as herbicide?
A. Auxin C. Cytokinins
B. Gibberellic acid D. All of these

Q.317 Auxin 2, 4 – D is used for what?
A. To remove weeds from farms by formers C. To induce flowering in horticulture
B. To remove weeds from lawn by gardeners D. All of these

Q.318 Following are the functions of insulin except
A. Glycogenesis C. ↑ Glucose utilization by adipocyte
B. ↑ Glucose utilization by hepatocyte D. Gluconeogenesis

Q.319 Different types of gibberellins is reported from what kind of organisms?
A. Fungi B. Higher plants
C. Both A. and B. D. Protists

Q.320 The name 'Auxin' was given to which chemical?
A. Indole – 3 – acetic acid C. Indole – 6 – acetic acid
B. Indole – 3 – butyric acid D. Indole – 6 – butyric acid

Q.321 What prevents the fruit and leaf to drop in early?
A. ABA B. IAA
C. NAA D. Both B. and C.

Q.322 What promotes the abscission of older mature leaf?
A. Abscisic acid B. Auxin
C. Ethylene D. Cytokinin's

Q.323 One of the synthetic auxins is:
A. IBA B. NAA
C. IAA D. GA

Q.324 Parthenocarpic fruit cannot be produced by application of
A. IAA B. ABA
C. 2, 4 – D D. IBA

Q.325 Which statements are correct?
A. Cytokinin's suppress the synthesis of chlorophyll
B. Auxins control apical dominance
C. Gibberellins promote shoot elongation
D. Abscisic acid enables seeds to withstand desiccation
A. a and B. only C. B. and C. only
B. a and C. only D. B., C. and D. only

Q.326 Which is not an influence of auxins?
A. Parthenocarpy C. Bolting
B. Tropical movements D. Apical dominance

Q.327 Alpha – amylase synthesis is promoted by
A. IAA B. NAA
C. Cytokinin D. GA

Q.328 Presence of which of the following in a seed is associated with dormancy?
A. Abscisic acid B. Gibberellic acid
C. Ethylene D. Auxin

Q.329 The longest cell in the body of an animal is
A. Osteocytes C. Neuron
B. Chromatophores D. Lymph corpuscles

Q.330 Axon is characterized by
A. Transformation of energy C. Providing energy for impulse
B. Receiving the impulse D. Conduction of impulse

Q.331 Afferent nerve fibres carry impulses from
A. Effector organs to central nervous system
B. Receptors to central nervous system
C. Central nervous system to muscles
D. Central nervous system to receptors

Q.332 Which part of mammalian brain controls the muscular co-ordination?
A. Cerebrum C. Cerebellum
B. Corpus callosum D. Medulla oblongata

Q.333 Nerve impulse is
A. Carried by afferent and efferent fibres
B. Is not carried by any afferent or efferent fibres
C. Is carried away by afferent fibres and brought about by efferent fibres
D. Is brought by afferent fibres and carried by efferent fibres

Q.334 Which of the following depicts the concentration of sodium and potassium when a neuron is at resting potential?
A. High potassium and high sodium outside the neurons
B. High potassium and low sodium outside the neurons
C. Low potassium and low sodium outside the neurons
D. Low potassium and high sodium outside the neurons

Q.335 When action potential begins, sodium gates open, allowing Na+ ions to cross the membrane. Now the polarity changes to
A. Negative outside and positive inside
B. Positive outside and negative inside
C. Charged protein outside; Na$^+$ and K$^+$ out-side
D. Na$^+$ and K$^+$ outside and water only in-side

Q.336 Which is NOT true of a synapse?
A. Neurotransmitters affect postsynaptic neurons
B. Many neurons may be involved
C. A synaptic cleft separates the neurons of the synapse
D. Neurotransmitters are released from dendrites

Q.337 The cranial nerves
A. Arise from spinal cord C. Control sympathetic pathways
B. Have both motor and sensory functions D. All of the above

Q.338 After firing an impulse, a neuron is incapable of responding to another stimulus for the duration of its

A. Membrane potential
C. Refractory period
B. Threshold level
D. Action potential

Q.339 In mammals, the autonomic system is composed of

A. Sympathetic and parasympathetic nerves
B. Cranial and spinal nerves
C. Brain and spinal cord
D. Medullated and non-medullated nerves

Q.340 Which of the following is NOT an effect produced by parasympathetic stimulation?

A. Dilation of the pupils
C. Increased stomach activity
B. Increased saliva production
D. Constriction of the bronchi

Q.341 Synaptic vesicles are present:

A. Within the presynaptic knob
C. Within the postsynaptic knob
B. In the synaptic cleft
D. In all of them

Q.342 Cell bodies of sensory neurons constitute:

A. dorsal root ganglion
C. ventral root ganglion
B. dorsal root
D. posterior root ganglion

Q.343 Which of the following is common to all neurones?

A. a cell body which contains a nucleus
C. presence of nodes of ranvier
B. a thick myelin sheath
D. presence of schwann cells

Q.344 The chief morphological and physiological unit of the nervous system is the:

A. Ganglion
B. Neuron
C. Reflex
D. Synapse

Q.345 The groups of ribosomes present in the cell body of the neuron, which are associated with rough endoplasmic reticulum, are called:

A. Meissner's corpuscles
C. Pacinian corpuscles
B. Nissl's granules
D. lysosome granules

Q.346 A nerve impulse is a wave of electrochemical change traveling along the length of the neuron involving chemical reactions and movement of ions across the:

A. Synapse
B. Cell wall
C. Cell membrane
D. Axon

Q.347 The mammalian forebrain is differentiated into the thalamus, limbic system and the:

A. Cerebellum
B. Cerebrum
C. Hippocampus
D. Hypothalamus

Q.348 The number of human cerebral nerves is:

A. 12
B. 24
C. 31
D. 62

Q.349 Neurotransmitters are released by:

A. Axon ending
B. Dendron ending
C. Cell body
D. Synaptic cleft

Q.350 The movement of the nerve impulse across synaptic cleft is primarily?

A. A chemical event
C. A electrical event
B. A physical event
D. A biological event

Q.351 Cerebellum of brain is concerned with:

A. Balancing during sitting
B. Coordination of muscular movements
C. Balancing during active movement
D. Initiation of muscular contraction

Q.352 The origin of sympathetic nervous system is from?

A. Brain
C. Middle part of spinal cord
B. Upper part of spinal cord
D. Lower part of spinal cord

Q.353 A hormone shows its effect on an organ known as:

A. Affected organ
B. Initiator organ
C. Target organ
D. Inhibitor organ

Q.354 Identify the non-directional orientation behavior.

A. Taxis
B. Kinesis
C. Both of these
D. None of these

Q.355 During the process of delivery, the uterine contractions occur; it is related to:

A. The release of oxytocin from anterior pituitary gland
B. The release of oestrogen from the anterior pituitary gland
C. The release of progesterone from the anterior pituitary gland
D. None of these is correct

Q.356 Aldosterone is secreted in response of:

A. Low blood pressure
B. Low blood volume
C. Low parathormone
D. A and B

SKN

Q.357 Which among the following hormones is regarded as male sex hormone?
A. Testosterone
B. FSH
C. Gonadotropic hormone
D. ICSH

Q.358 What is the function of ACTH?
A. To stimulate adrenal cortex
B. To stimulate adrenal medulla
C. To stimulate pituitary gland
D. Both A and C

Q.359 Diabetes mellitus is caused by:
A. Hyposecretion of cortisol
B. Hyposecretion of androgens
C. Hyposecretion of thyroxine
D. None of these

Q.360 The production of estrogen is regulated by which hormone?
A. Progesterone
B. LH
C. FSH
D. PTH

Q.361 What is the effect of hyposecretion of oxytocin?
A. Promotes normal labour process
B. Promotes milk formation
C. Inhibits normal labour process
D. Inhibits maturation of gonads

Q.362 What is the cause of diabetes insipidus?
A. Hyposecretion of vasopressin
B. Hypersecretion of ADH
C. Hyposecretion of insulin
D. Hyposecretion of glucocorticoid

Q.363 What is the chemical nature of ACTH?
A. Steroid
B. Catecholamine
C. Proteineous
D. Peptide

Q.364 Which hormone plays important role in milk production?
A. Oxytocin
B. Prolactin
C. ADH
D. LH

Q.365 Nicotine is a:
A. Steroid hormone
B. Type of neurotransmitter
C. Drug used to treat Parkinson's disease
D. None of these

Q.366 Which one of the following is degenerative neurological disorder?
A. Stroke
B. Alzheimer's disease
C. Dopamine
D. Tetany

Q.367 The mechanism by which hormones regulate other hormones is known as:
A. Competition
B. Antagonizing
C. Inhibition
D. Feedback

Q.368 What is the primary target of the hormones of hypothalamus?
A. Mammary gland
B. Male gonads
C. Thymus gland
D. Pituitary gland

Q.369 The process of glycogenesis occurs in liver and muscle cells; it is facilitated by:
A. Glucagon
B. Insulin
C. Somatostatin
D. Cortisone

Q.370 Interstitial-cell stimulating hormone (ICSH) is also known as:
A. Luteinizing hormone in males
B. Thyroxin hormone in males
C. Luteinizing hormone in females
D. Prolactin hormone in males

Q.371 Aldosterone tends to:
A. Promote blood volume
B Promote water retention
C. Both of these
D. None of these

Q.372 Grave's disease is concerned to which endocrine gland?
A. Thymus gland
B. Pancreas
C. Pituitary gland
D. Thyroid gland

Q.373 Hypersecretion of somatotropic hormone in adult life results in:
A. Dwarfism
B. Gigantism
C. Acromegaly
D. Cretinism

Q.374 The symptom(s) of hypothyroidism consist(s) of:
A. Weight gain
B. Intolerance to cold
C. Tongue swelling
D. A, B and C

Q.375 Islets of Langerhans are present in:
A. Adrenal gland
B. Pituitary gland
C. Pancreas
D. All of these

Q.376 Master endocrine gland:
A. Is under the control of posterior pituitary
B. Is under the control of thalamus
C. Is under the control of pineal gland
D. None of these

Q.377 The hormone(s) which increase(s) the level of calcium in blood is:
A. Calcitonin
B. Parathormone
C. Aldosterone
D. A and B

SKN

Q.378 Identify the gonadotropin hormone(s).
A. Luteotropic hormone (LTH)   B. Progesterone
C. Oestrogen   D. A, B and C

Q.379 In females, secondary sex characters in are maintained by:
A. LH   B. Oestrogen
C. Progesterone   D. A, B and C

Q.380 Child birth is facilitated by oxytocin hormone; this process is regulated through:
A. Positive feedback mechanism   B. Negative feedback mechanism
C. Both of these   D. None of these

Q.381 Prolactin hormone is produced by:
A. Mammary glands   B. Ovaries
C. Nipples   D. None of these

Q.382 The study of animal behavior is called:
A. Ecology   B. Heredity
C. Genetics   D. Ethology

Q.383 The animals have their greatest activity in the twilight hours are known as:
A. Circannual rhythms   B. Diurnal
C. Corpuscular   D. Nocturnal

Q.384 The hormone which helps to keep normal motility of the gastrointestinal tract is:
A. Thyroxine   B. Insulin
C. Epinephrine   D. Thymosin

Q.385 All of the following are produced by adenohypophysis except:
A. PIF   B. TRF
C. Somatostatin   D. None, as all of these are not produced by adenohypophysis

Q.386 Which one of the following hormones can pass through plasma membrane?
A. Cortisol   B. Glucagon
C. Thyroxine   D. All of these

Q.387 Which one of the following endocrine structure(s) is not very prominent in humans?
A. Pituitary gland   B. Pineal gland
C. Median lobe of pituitary   D. All of these

Q.388 CRF is controlled by:
I. Steroid level in blood
II. Direct nervous stimulation
III. Protein level in the blood
A. I only   B. II only
C. I and III   D. I and II

Q.389 The release of TSH is regulated by:
A. Thyroid stimulating hormone   B. Somatostatin
C. TRF   D. CRF

Q.390 Oxytocin is stored in:
A. Anterior lobe of pituitary gland   B. Posterior lobe of pituitary gland
C. Hypothalamus   D. Thalamus

Q.391 Concentration of MSH is raised:
A. During childhood   B. During adolescence
C. During pregnancy   D. During menstrual cycle

Q.392 Which among the following endocrine glands secretes more hormones?
A. Neurohypophysis   B. Adenohypophysis
C. Thyroid gland   D. Adrenal medulla

Q.393 Insulin hormone is related to all of the following functions except:
I. It stimulates uptake of amino acids into cells.
II. It increases rate of protein synthesis.
III. It reverses the activities of glucocorticoids.
A. I only   B. II only
C. III only   D. I, II and III are the functions of insulin

Q.394 Acromegaly is not related to:
A. Enlargement of legs   B. Enlargement of hands
C. Enlargement of feet   D. None, as all are related to acromegaly

Q.395 What is/are the targets of ACTH?
A. It acts on adrenal cortex   B. It acts on adrenal medulla
C. It acts on anterior pituitary   D. Both A and C

Q.396 In humans, LH affects:
A. Testosterone production   B. Ovulation
C. A and B   D. None of these

Q.397 Release of melanin is regulated by:
A. Melanocyte stimulating hormone   B. Hairs
C. Skin   D. All of these

Q.398 The hormone(s) which is/are produced by neurosecretory cells is/are:
A. ADH B. ACTH
C. LTH D. None of these

Q.399 Overproduction of which hormone may lead to the kidney problems?
A. Oxytocin B. Vasopressin
C. Thymosin D. None of these

Q.400 Identify the functions of oxytocin hormone.
I. It causes the dilation of milk ducts of mother's mammary glands.
II. It promotes milk formation by mammary glands.
III. It promotes milk ejection.
A. I and II B. II and III
C. I and III D. I, II and III

Q.401 Thyroid gland is composed of:
A. One lobe B. Two lobes
C. Three lobes D. Four lobes

Q.402 Prostaglandins are a group of localized hormones. They provide:
A. Protection during infections B. Protection against bone damage
C. Protection to brain D. None of these

Q.403 Which hormone is secreted in increased level of blood sugar?
A. Glucagon B. Insulin
C. Cortisone D. Either A or C

Q.404 Thyroxine contains:
A. 1 iodine atom B. Two iodine atoms
C. Three iodine atoms D. Four iodine atoms

Q.405 Liver secretion is regulated by:
A. Prostaglandin B. Secretin
C. Cholecystokinin D. Endorphins

Q.406 When two hormones exert the same effect in different ways, the condition is known as:
A. Antagonistic effect B. Inhibitory effect
C. Synergetic effect D. Abnormal effect

Q.407 Testosterone is secreted from interstitial cells among seminiferous tubules:
A. Under the influence of ICSH B. Under the influence of oesterogen
C. Under the influence of ACTH D. Under the influence of GHRF

Q.408 Graves' disease is caused by:
A. Hypersecretion of T3 and T4 B. Hyposecretion of T3 and T4
C. Both A and B D. None of these

Q.409 Cellular respiration is promoted by:
A. Glucagon hormone B. Aldosterone hormone
C. Insulin hormone D. All of these

Q.410 Find the correct option about the products of ovaries.
I. Oestrogen II. Egg cell III. Progesterone
A. I and III B. I and II
C. II and III D. I, II and III

Q.411 Hypertension and aggressive behaviour are observed in some persons during routine life. It is because of:
A. Overproduction of ACTH B. Underproduction of noradrenaline
C. Overproduction of epinephrine D. Underproduction of T3 and T4

Q.412 Synthesis of cholesterol is related to:
A. Hormones which are steroid in nature B. T3 and T4 hormones
C. Hormones produced by ovaries D. Hormones produced by pineal gland

Q.413 Solution of problem without trial and error is known as:
A. Insight learning B. Latent learning
C. Operant conditioning D. Classic conditioning

Q.414 The hormone(s) involved in fight against microbes is/are:
I. Melatonin
II. Thymosin
III. Thyroxine
A. I only B. II only
C. III only D. I, II and III

Q.415 Progesterone is produced by:
A. Graafian follicles B. Interstitial cells
C. Corpus luteum D. Both A and C

Q.416 All of the following hormones are produced by adrenal cortex except:
A. Androgens B. Cortisone and aldosterone
C. Adrenocorticotropic hormone D. None, as A, B and C are produced by adrenal cortex

Q.417 Miscarriage may be caused by many reasons; one of them is:
A. Deficient production of FSH during pregnancy
B. Overproduction of oestrogen during pregnancy
C. Deficient production of progesterone during pregnancy
D. Overproduction of oxytocin during pregnancy

Q.418 Loss of salts is a feature observed in:
A. Cushing's syndrome B. Addison's disease
C. Grave's disease D. Diabetes insipidus

Q.419 Deficient production of _____ causes the development of feminine characteristics in males.
A. Androgens by adrenal cortex B. Oestrogen by ovaries
C. Testosterone by testes D. Progesterone by placenta

Q.420 Decreased calcium level in blood:
A. Inhibits the secretion of calcitonin B. Inhibits the secretion of parathormone
C. Stimulates the production of calcitonin D. None of these

Q.421 Short stature due to hyposecretion of STH is known as:
A. Cretinism B. Dwarfism
C. Acromegaly D. Either A or B

Q.422 Under secretion of which hormone results in increased excitability of neurons?
A. Calcitonin B. Parathormone
C. ADH D. Prolactin

Q.423 Coarse facial features are observed in:
A. Hypothyroidism B. Hypocalcaemia
C. Hyperthyroidism D. Hypercalcaemia

Q.424 What is true about the function of renin enzyme?
I. It acts to convert angiotensinogen into angiotensin-I
II. It acts to convert angiotensin-I into angiotensinogen
III. It acts to convert angiotensin-I into angiotensin-II
A. I only B. II only
C. III only D. None of these

Q.425 What is true about calcitonin hormone?
A. It promotes Ca^{++} absorption in intestine B. It increases Ca^{++} absorption in kidneys
C. It decreases Ca^{++} excretion in urine D. None of these

Q.426 Which among the following is not produced by anterior pituitary gland?
A. TSH B. LTH
C. STH D. PTH

Q.427 Healing of uterine lining (wall) after menstruation is done by:
A. Follicle stimulating hormone B. Androgens
C. Aldosterone D. Oestrogen

Q.428 Deficient production of insulin results in:
A. Diabetes mellitus B. Diabetes insipidus
C. Grave's disease D. Both A and B

Q.429 Gluconeogenesis is:
A. Synthesis of glucose from glycogen B. Synthesis of glycogen from glucose
C. Both A and B D. None of these

Q.430 The hormone(s) affect(s) directly on growth and development is/are:
A. Somatotropic hormone B. Prolactin hormone
C. Hypothalamic somatostatin D. All of these

Q.431 Dementia is characteristic symptom of:
A. Alzheimer's disease B. Parkinson's disease
C. Epilepsy D. Addison's disease

Q.432 Dietary hyperthyroidism result in:
A. Cretinism B. Grave's disease
C. Myxedema D. Goitre

Q.433 Number of cervical spinal nerves are
A. 12 pairs B. 7 pairs
C. 8 pairs D. 5 pairs

Q.434 Which one of the following is NOT Sympathetic activity?
A. Fast heart rate B. Inhibition of saliva
C. Decreased brain activity D. Conversation of glycogen

Q.435 Which one of the following neuron is multipolar and unmylienated:
A. Sensory neuron B. Interneuron
C. Mother neuron D. Both A and C
E. Both B and C

Q.436 Which part of mylienated nerve fibers lacks mylien sheath:
A. Total length of axon B. Node of Ranvier
C. Cell body D. Both B and C

Q.437 Cerebral medulla is made up of:
A. Mylienated nerve fibers
B. Unmylienated nerves fibers
C. Unmylienated nerves fibers + cell bodies
D. Mylienated nerves fibers + cell bodies

Q.438 Vagus nerve is:
A. Mixed spinal nerves B. Mixed cranial nerves
C. Motor spinal nerves D. Motor cranial nerves

Q.439 Alcohol belongs to class of drugs:
A. Depressants B. Stimulant
C. Hallucinogens D. None

Q.440 Which one of the following is inhibitory neurotransmitters?
A. Epinephrine B. Nar-epinephrine
C. Acetylcholine D. Gamma amino butyric acid

Q.441 Somatic division of Nervous System controls:
A. Sensory and motor activity of smooth muscle
B. Sensory and motor activity of skeleton muscle
C. Sensory and motor activity of cardiac muscle
D. Both A and C

Q.442 Dura matter is lying:
A. Above brain tissue B. Above pia matter
C. Above cranium D. Below cranium

Q.443 Cerebrospinal fluid is made by:
A. Choroid plexus and ependymal cells B. Choroid plexus only
C. Ependymal cells only D. Ventricles of brain

Q.444 Sexual arousal, love, hate and fear are controlled by:
A. Cerebral B. Hippocampus
C. Olfactory lobe D. Amygdales

Q.445 3rd ventricles is cavity of:
A. Cerebral B. Thalamus
C. Hypothalamus D. Brain stem

Q.446 Brain stem does not include:
A. Midbrain B. Medulla oblongata
C. Cerebellum D. Pons

Q.447 Cerebral aqueduct is a tube connecting:
A. Two laterals B. Two cerebral hemispheres
C. 3rd and 4th ventricles D. 4th ventricles and central canal

Q.448 Auditory relay center is present in:
A. Temporal lobe B. Frontal lobe
C. Medulla oblongata D. Corpus callosum
E. Mid brain

Q.449 Sensory nerves fiber enters spinal cord though:
A. Ventral nerve root B. Dorsal nerve root
C. dorsal horn D. Ventral horn

Q.450 Which one of the following is NOT true regarding spinal cord?
A. Starts at foramen magnum B. Ends at L3 vertebra
C. Inner butterfly shaped structure D. Cavity of central canal is called ventricular foramen

Q.451 Synaptic vesicles:
A. Contain neurotransmitters
B. Made by ribosome, endoplasmic reticulum
C. Are present in pre-synaptic neurons
D. Both A and B are correct
E. All are correct

Q.452 Ions important for transmission of nerve impulse are:
A. Na^+ ions only B. K^+ ions only
C. Both Na^+ and K^+ ions D. Na^+, K^+ and Ca^{++} ions

Q.453 Nissil's granules are present in:
A. Dendrites B. Cell body
C. Axon D. Synaptic knobs

Q.454 Which of the following step of nerve impulse transmission depends upon chemicals:
A. Transmission of impulse from dendrite to cell body
B. Transmission of impulse from cell body to axon
C. Transmission of impulse from axon to axon
D. Synaptic transmission

SKN

Q.455 Correct values of spike potential, Threshold potential and Resting membrane potentials are:
A. -70 mv, -50 mv, +35 mv B. -50 mv, -70 mv, +35 mv
C. +35 mv, -50 mv, -70 mv D. +35 mv, -70 mv, -50 mv

Q.456 Major factor involved in changing the resting membrane potential to action potential is:
A. Influx of K^+ ions B. Efflux of K^+ ions
C. Influx of Ca^{++} ions D. Release of neurotransmitters
E. Influx of Na^+ ions

Q.457 Restoring RMP in neuron is due to
A. Voltage gated sodium channel B. Sodium potassium atpase pump
C. Voltage gated calcium channals D. Voltage gated potassium channals

Q.458 Voltage gated calcium channals are present in:
A. Axolemma of dendrites of post-synaptic neurons
B. Axolemma of axons of post-synaptic neuron
C. Axolemma of synaptic knob of pre- synaptic neuron
D. Axolemma of synaptic knob of post- synaptic neuron

Q.459 Correct reflex arc for reflex actions is:
A. Receptors → Sensory neuron → Spinal Cord → Motor Neuron → Effects
B. Receptors → Sensory Neuron → Brain → Motor Neuron → Effect
C. Receptor → Sensory Neuron → Spinal Cord → Brain → Motor Neuron
D. Effect → Receptors → Sensory Neuron → Spinal Cord → Brain

Q.460 Sensory cortex lies in:
A. Frontal lobe of cerebrum B. Parietal lobe of cerebrum
C. Frontal lobe of cerebellum D. Parietal lobe of cerebellum

Q.461 Which one of the following is wrong pair?
A. Hearing Center → Temporal lobe of Cerebrum
B. Breathing center →Medulla oblongata
C. Visual cortex →Cerebellum
D. Olfactory cortex →Temporal lobe

Q.462 Thalamus acts as relay center for all senses except:
A. Smell B. Taste
C. Vision D. Motor response

Q.463 Which one of the following is NOT a mechanorecepter:
A. Meissner's corpuscles B. Merkel disc
C. Rods and cones D. Pacnian corpuscles

Q.464 Difference b/w Schwann cells and oligodendrocytes is:
A. Both make mylien sheath in CNS
B. Both make mylien sheath in PNS
C. Schwann cells makes mylien sheat in CNS
D. Oligodendrocytes make mylien sheath in CNS

Q.465 Watering of Mouth is;
A. voluntary action B. involuntary action
C. Reflex action D. Both A and B

Q.466 Saltatory conduction is feature of
A. Umylienated nerve fibers B. Mylienated nerve fiber
C. Both A and B D. Neither A nor B

Q.467 Speed of nerve impulse is fast in mylienated nerve fiber because:
A. Sodium channals open only at node of ranvier
B. Sodium channals open through out of fiber
C. Sodium channals close at node of Ranvier
D. Sodium channals close throughout length of fiber

Q.468 Short preganglionic and long postganglionic fibers are feature of
A. Sympathetic nervous system B. Perasympthatic nervous system
C. Both A and B D. Somatic nervous system

Q.469 Deepest of all is
A. Meissner's corpuscles B. Merkei's disc
C. Pacinian corpuscles D. Both A and C

Q.470 Aluminum deposits in brain causes
A. Alzeihmer's disease B. Meningitis
C. CVA D. Aphasia

Q.471 Deep sleep waves in EEG are represented by:
A. Alpha waves B. Beta waves
C. Theta waves D. Delta waves

Q.472 Drunken gait is feature of damage to
A. Cerebrum B. Cerebellum
C. Thalamus D. Spinal cord

SKN

Q.473 Which one of the following acts as a bridge b/w cerebellum, medulla oblongata and cerebrum?
A. Pons
B. Brain stem
C. Mid brain
D. Limbic system

Q.474 Which one of the following is not part of limbic system?
A. Thalamus
B. Hypothalamus
C. Hippocampus
D. Amygdalus
E. Olfactory bulb

Q.475 Local anesthesia is given at
A. L1
B. L2
C. L3
D. L4
E. L5

Q.476 Bond of white of matter connecting two cerebral hemispheres is
A. Sella turcica
B. Cerebral aqueduct
C. Foramen magnum
D. Corpus callosum

Q.477 Motor cranial nerves are
A. I, II, VII
B. III, IV, VI, XI, XII
C. V, VII, IX, X
D. None

Q.478 Sweet taste receptors are present an
A. Anterior end of tongue
B. Lateral side of tongue
C. Posterior end of tongue
D. Throughout tongue

Q.479 Viceral pain receptors are absent in
A. Heart
B. Brain
C. Lungs
D. Kidney

Q.480 Effectors are innervated by
A. Sensory neurons
B. Interneurons
C. Motor neurons
D. Associative neurons

Q.481 Fast channals are
A. Sodium channals
B. Potassium channals
C. Calcium channals
D. Sodium potassium pump

Q.482 Which one of the following is a reflex action?
A. Pain withdrawal reflex
B. Writing
C. Walking
D. Running
E. Eating

Q.483 Which of the following is common to all neurons?
A. A cell body which contains a nucleus
B. A thick myelin sheath
C. Presence of nodes of Ranvier
D. Presence of Schwann cells

Q.484 What will occur if a drug at the neuromuscular junction blocks the receptor sites on the post-synaptic membrane?
A. Inhibition of Acetylcholine release
B. Muscle contraction
C. Muscle paralysis
D. Release of calcium ions

Q.485 The groups of ribosomes present in the cell body of the neuron, which are associated with rough endoplasmic reticulum are called:
A. Meissner's corpuscles
B. Pacinian corpuscles
C. Nissl's granules
D. Lysosome granules

Q.486 The mammalian forebrain is differentiated into the thalamus, limbic System and the:
A. Cerebellum
B. Cerebrum
C. Hippocampus
D. Hypothalamus

Q.487 Information back from the control center to the effectors as done by nerve path way.
A. Afferent
B. Efferent
C. Both
D. None

Q.488 An organ where a hormone shows its effect is called:
A. Effector
B. Target
C. Initiator
D. Terminator

Q.489 The primary target of the hormones of hypothalamus is:
A. Pineal gland
B. Thymus gland
C. Pituitary gland
D. Gonads

Q.490 Diabetes mellitus is the result of:
A. Under secretion of insulin
B. Under secretion of thyroxin
C. Under secretion of estrogen
D. Under secretion of vasopressin

Q.491 The hormone which reduces the sodium loss through urine and sweat is:
A. Calcitonin
B. Aldosterone
C. Parathormone
D. Vasopressin

Q.492 What is the essential character for a substance categorized as hormone?
A. Organic nature
B. Transportation by duct
C. Proteins
D. Production throughout life

Q.493 Hormones can regulate other hormones through:
A. Competition
B. Inhibition
C. Feedback
D. Antagonizing

Q.494 Besides testes, androgens are also produced by:
A. Thyroid
B. Thymus
C. Adrenal medulla
D. Adrenal cortex

Q.495 Glucagon is secreted from which cells of is let of Langerhans?
A. α-cells
B. β-cells
C. γ-cells
D. Both α and β cells

Q.496 Which is not a ductless gland?
A. Testis
B. Ovary
C. Sub-maxillary
D. Parathyroid

Q.497 Which one is polypeptide?
A. FSH
B. Progesterone
C. Testosterone
D. Estrogen

Q.498 Diabetes insipidus is due to less secretion of:
A. Vasopressin
B. Insulin
C. Thyroxine
D. Progesterone

Q.499 Chemical nature of LH and ICSH is:
A. Steroids
B. Polypeptides
C. Tyrosine derivatives
D. Amino acids

Q.500 All of the following cause delay in leaf senescence except:
A. Auxins
B. Cytokinins
C. Gibberellins
D. Abscisic acid

Q.501 Which part of neuron may act as receptor as well?
A. Dendrite
B. Axon
C. Cell body
D. Ganglion

Q.502 It acts as relay neuron:
A. Sensory
B. Motor
C. Associative
D. Uni-polar

Q.503 Identify the incorrect statement about saltatory nerve impulse:
A. Faster conduction of impulse
B. Action potential jumps from node to node
C. Only occurs in myelinated neurons
D. Characteristic of all neurons

Q.504 Myelin sheath is mainly present in:
A. Dendrites
B. Axon
C. Soma
D. Cell body

Q.505 The main neurotransmitter for synapses that lies outside the CNS is:
A. Adrenaline
B. Dopamine
C. Serotonin
D. Acetylcholine

Q.506 How many binding sites for Na^+ and K^+ are present in Na^+—K^+ pump, respectively?
A. 1,2
B. 2,3
C. 2,1
D. 3,2

Q.507 Which of the following membrane potential depicts hyperpolarization?
A. -50mV
B. +50MV
C. -90mV
D. -70Mv

Q.508 Dendrites transmit impulse ______ cell body and axon transmit impulse _______cell body.
A. Towards, away from
B. Away, towards
C. Towards, towards
D. Away, away

Q.509 Nissl's granules are found in all except:
A. Soma
B. Dendrites
C. Axon
D. Cell body

Q.510 Neuron can:
A. Detect stimuli
B. Receive stimuli
C. Transmit stimuli
D. All A, B, C

Q.511 Which option correctly represents active transport of sodium and potassium ions across plasma membrane through Na/K pump?
A. $3Na^+$ out for $2K^+$ in
B. $3Na^+$ in for $2K^+$ out
C. $2Na^+$ out for $3K^+$ in
D. $2Na^+$ in for $3K^+$ out

Q.512 The electrical potential difference across the resting plasma membrane is called as:
A. Spike potential
B. Action potential
C. Resting potential
D. All of these

Q.513 Depolarization occurs due to:
A. Influx of Na^+
B. Efflux of Na^+
C. Influx of K^+
D. Efflux of K^+

SKN

Q.514 The correct sequence for depolarization and repolarization is:

A. Stimulus applied at a site on polarized membrane
B. Increase the permeability for Na
C. Generation of A.P. (Action Potential)
D. Increase the permeability for K^+
E. Restoration of membrane potential

A. A→B→C→D→E B. B→A→C→D→E
C. C→B→A→D→E D. E→D→A→B→C

Q.515 Unidirectional transmission of the nerve impulse is maintained by:

A. Relay neurons B. Myelin sheath
C. Synapse D. Membrane polarity

Q.516 In reflex action, the reflex arc is formed

A. Muscle, receptor, brain B. Brain, spinal cord, muscle
C. Receptor, spinal cord, muscle D. Receptor, muscle, spinal cord

Q.517 Which organelle cannot be found in synaptic knob of a neuron?

A. Mitochondria B. Secretory vesicles
C. Ribosomes D. Nucleus

Q.518 Pick the system which transports hormone in the body:

A. Endocrine system B. Circulatory system
C. Nervous system D. Muscular system

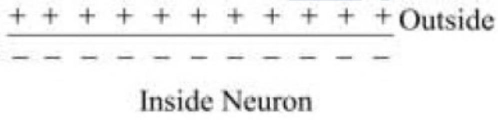
Q.519 Most portion of pancreas acts as:

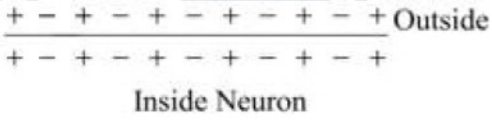
A. Endocrine B. Mesocrine
C. Exocrine D. Autocrine

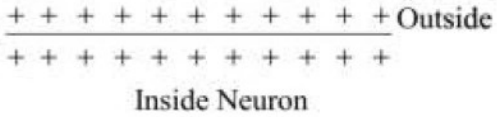
Q.520 Main source of auxins in plants are:

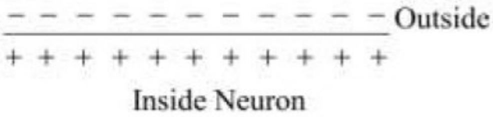
A. Apices B. Germinating seeds
C. Cambium D. Flower

Q.521 Which one of the following conditions best describes active membrane potential?

A)


C)


B)


D)


Q.522 A typical neuron at rest:

A. Is more positive outside than inside
B. Is more negative outside than inside
C. Has no charge on either side
D. Has an equal charge on either side

Q.523 Which one of the following is a precursor of steroid hormones?

A. Glycerol B. Nucleotide
C. Amino acid D. Cholesterol

Q.524 Hormones are the organic compounds of varying structural complexity. Which of the following is not a function or property of these compounds?

A. They initiate new biochemical reactions
B. They are poured directly into blood
C. They may be proteins
D. They affect target cells

Q.525 Which group of hormones is made up of amino acids and their derivatives?

A. Vasopressin and ADH B. Epinephrine and Non-Epinephrine
C. Estrogen and Testosterone D. Insulin and Glucagon

Q.526 Which of the following is the function of glucagon hormone?

A. Glucose to lipids B. Glucose to proteins
C. Glucose to glycogen D. Glycogen to glucose

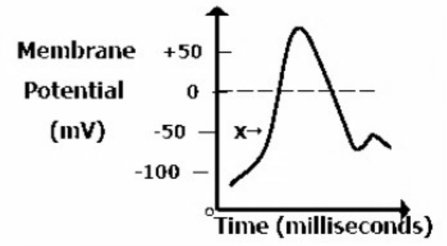
Q.527 Chemically, insulin and glucagon are:

A. Carbohydrates B. Proteins
C. Lipids D. Nucleic acids

Q.528 Which one of the following is not an amino acid derivative-hormone?

A. Calcitonin B. Thyroxin
C. Epinephrine D. Nor-adrenaline

Q.529 In the following diagram of action potential in a neuron, 'x' depicts:



A. Depolarization B. Polarization
C. Recovery D. Hyperpolarization

Q.530 Pick out the pressure receptors:
A. Chemoreceptors B. Mechanoreceptors
C. Photoreceptors D. Thermoreceptors

Q.531 Which of the following produce response?
A. Effectors B. Stimulators
C. Nerve D. Brain

Q.532 Taste buds on the tongue are example of:
A. Thermoreceptors B. Photoreceptors
C. Pressure receptors D. Chemoreceptors

Q.533 In nervous system, chemical messengers are called
A. Enzymes B. Neurotransmitters
C. Chemoreceptors D. Hormones

Q.534 The reflex action is a phenomenon which only involves:
A. Brain, receptors, spinal cord B. Receptors, effectors and spinal cord
C. Receptors, neurons, brain D. Receptors and effectors

Q.535 In an action potential, the permeability of sodium ions in the neuron increases due to:
A. Repolarization
B. The opening of sodium gates
C. The action of the acetylcholinesterase enzyme
D. Sodium ions forming an ionic bonding

Q.536 If stimulation is above impulses travel to the brain along the sensory neuron.
A. Action Potential B. Threshold
C. Resting Potential D. Recovery Period

Q.537 Acetylcholine and nor-adrenaline are two types of ___________ used in our nervous system.
A. Hormones
B. Channel and carrier proteins in the cell membrane of a neuron
C. Enzymes
D. Neurotransmitters

Q.538 The main effectors are glands, which respond by ____________ and muscles, which respond by _________respectively.
A. Secretion, secretion B. Secretion, contraction
C. Apoptosis, mitosis D. Conduction, necrosis

Q.539 Most abundant type of receptors found in human is:
A. Heat receptors B. Cold receptors
C. Pain receptors D. Electromagnetic receptors

Q.540 In humans, nervous coordination is described by:
A. Reception of stimulus by receptors
B. Analysis of the stimulus by inter neurons
C. Generation of response by effectors
D. All A, B, C

Q.541 It is the component of nervous system that detects mechanical or chemical changes in external or internal environment:
A. Receptor B. Effector
C. Relay neuron D. Sensory neuron

Q.542 The sensory neuron transmits impulses from:
A. Effector organ to the spinal cord B. Receptor cells to the effector organ
C. Receptor cells to the spinal cord D. Spinal cord to the effector organ

Q.543 Sensation of pain is detected by:
A. Meissner's corpuscle B. Pacinian corpuscle
C. Free nerve endings D. Encapsulated endings

Q.544 Which one of the following identifies the role of acetylcholine in nerve physiology?
A. It increases the resting potential of the cell
B. It increases the selective permeability of the cell membrane
C. It activates the sodium pump mechanism of the cell
D. It increases the potassium concentration inside the cell

Q.545 Impulses travel very rapidly along nerves from the leg muscles of a mammal because:
A. There is a high concentration of Na^+ ions inside the axons
B. The nerve contains myelinated fibers
C. There is a potential difference across the axon membranes
D. The cell bodies of the fibers are contained within the dorsal root ganglion

Q.546 Which of the following is not strictly considered a part of neuron?
A. Nissl's bodies B. Myelin sheath
C. Axon D. Dendrites

Q.547 Synaptic knob of neuron consists of all except:
A. Neurotransmitter receptor B. Neurotransmitter molecule
C. Mitochondria D. Synaptic vesicles

Q.548 All of the following structures are found in axoplasm except:
A. Nucleus B. Microtubules
C. Neurofibrils D. Mitochondria

Q.549 The neurons that interpret and receive information and stimulate motor neurons are:
A. Sensory neurons B. Interneurons
C. Motor neurons D. Afferent neurons

Q.550 What used to be described as Nissl's granules in a nerve cell are now identified as:
A. Fat granules B. Ribosomes
C. Mitochondria D. Cell metabolites

Q.551 Which of the following is common to all neurons?
A. A cell body which contains a nucleus B. A thick myelin sheath
C. Presence of nodes of Ranvier D. Several long axons

Q.552 Four events in the transmission of nerve impulses across synapse are:
1. Depolarization of the pre-synaptic membrane
2. Propagation of postsynaptic action potential
3. Hydrolysis of neurotransmitter substance
4. Rupturing of synaptic vesicles
In which sequence do these events occur?

	First ⟶			Last
A.	1	3	2	4
B.	1	4	2	3
C.	4	1	3	2
D.	4	3	1	2

Q.553 Which element ion helps in releasing "Acetylcholine" at synaptic cleft?
A. Na^+ B. K^+
C. Ca^{+2} D. PO^{3-}_4

Q.554 All of the following functions are associated with synapse except:
A. They ensure one-way transmission of impulse
B. They increase possible range of actions in response to a stimulus
C. They increase speed of nerve impulse
D. They are involved in memory and learning

Q.555 Dorsal root ganglia are formed by:
A. Cell bodies of sensory neurons B. Cell bodies of motor neurons
C. Dendrons of sensory neurons D. Axons of motor neurons

Q.556 In reflex action, the reflex arc is formed by:
A. Muscle, receptor, brain B. Brain, spinal cord, muscle
C. Receptor, spinal cord, muscle D. Receptor, muscle, spinal cord

Q.557 Which of the following is not involved in knee-jerk reflex?
A. Muscle B. Motor neuron
C. Brain D. Inter-neurons

Q.558 In the nerve cells, reversal of the resting potential is known as depolarization. This occurs due to:
A. Influx of Na^+ B. Influx of K^+
C. Influx of Ca^{2+} and Cl^- D. Efflux of Na^+

Q.559 Which of the following option is correct with respect to concentration of ions during resting membrane potential?

Option	Outside the Nerve Cell	Inside the Nerve Cell
A.	Na+ are 10-fold higher	K + are 20 folds higher
B.	Na+ are 20-fold higher	K+ are 10 folds higher
C.		
D.		

Q.560 It is main neurotransmitter for synapses that lie outside the central nervous system:
A. Nor-adrenaline B. Acetylcholine
C. Serotonin D. Dopamine

Q.561 Neuro-receptor junction is developed by ________ while ___________is involved in making neuromuscular junction, respectively.
A. Associative neuron, motor neuron
B. Sensory neuron, motor neuron
C. Sensory neuron, associative neuron
D. Motor neuron, sensory neuron

Q.562 A threshold stimulus causes electrochemical changes which generate ____________that runs throughout the length of neuron.
A. Membrane potential B. Resting membrane potential
C. Active membrane potential D. Electrical potential

Q.563 The concentrations of sodium and potassium inside of the cell are maintained by:
A. Sodium gate B. Potassium gate
C. Sodium-potassium pump D. Calcium gate

Q.564 In unstimulated state, a neuron has a membrane potential of approximately:
A. -70mV B. -40mV
C. +70mV D. +50mV

Q.565 The resting membrane potential across neurolemma is due to differential distribution of:
A. Na and K^+ ions B. Na and Cl^- ions
C. Ca^{+2} and Mg^{+2} ions D. Ca^{+2} and Cl^- ions

Q.566 The chemicals which are released at the synaptic junction are called:
A. Hormones B. Neurotransmitters
C. Catecholamine D. Cytokinins

Q.567 Resting axonal membrane is:
A. Unpolarized and more permeable to Na^+
B. Polarized and more permeable to Na^+
C. Unpolarized and more permeable to K^+
D. Polarized and more permeable to K^+

Q.568 Na-K pump transports:
A. $3Na^+$ out for $2K^+$ in B. 2Na+ out for 3K + in
C. $3Na^+$ in for $2K^+$ out D. 2Na+ in for 3K + out

Q.569 Resting membrane potential is maintained by:
A. Node B. Neurotransmitters
C. Ion pumps D. Hydrophobic core of neurolemma

Q.570 Which of the following is incorrect about synaptic transmission?
A. Fusion of synaptic vesicles with pre-synaptic membrane
B. Release of neurotransmitter molecules into synaptic cleft
C. Binding of neurotransmitter molecules with receptor on pre-synaptic membrane
D. Change in permeability of post-synaptic membrane for ions

Q.571 Hormonal system is very important because:
A. Neural coordination is fast
B. Nerve fibres do not innervate all the cells of body
C. Neural system provides point to point coordination among organs
D. Neural coordination is short-lived

Q.572 All of the following are examples of neurotransmitters except:
A. Acetylcholine B. Serotonin
C. Dopamine D. Oxytocin

Q.573 Hormones can produce their effects by:
A. Denaturing enzymes B. Regulating enzymes
C. Stimulating enzymes D. Inhibiting enzymes

Q.574 Hypothalamus directly regulates:
A. Pituitary gland B. Thyroid gland
C. Thymus D. Pancreas

Q.575 Hormone/s is/are:
A. Non-nutrient chemicals B. Intercellular messengers
C. Produced in traces D. All A, B, C

Q.576 It is an example of amino acid derivative hormone:
A. Insulin B. PTH
C. FSH D. Thyroxin

Q.577 Name the hormone which acts mainly on hepatocytes, adipocytes and enhances cellular glucose uptake and utilization:
A. Glucagon B. Secretion
C. Gastrin D. Insulin

Q.578 Diabetes mellitus is characterized by:
A. Ketonuria B. Glycosuria
C. Prolonged hyperglycemia D. All A, B, C

SKN

Q.579 Hormones are called chemical signals that stimulate specific target tissues. Their specificity is due to the presence of signal receiving 'receptors' only in the respective target tissues. Where are these receptors present in case of hormones of protein nature?

A. Extracellular matrix
B. Blood
C. Plasma membrane
D. Nucleus

Q.580 Which of the following is the only anti- diabetic hormone present in human blood?

A. Glucagon
B. Cortisol
C. Epinephrine
D. Insulin

Q.581 ADH is said to be a neurosecretion and is produced by cells present in:

A. Thalamus
B. Hypothalamus
C. Anterior pituitary
D. Posterior pituitary

Q.582 From which part of nephron, ADH stimulates reabsorption of water?

A. Proximal tubules
B. Loop of Henle
C. Distal tubules
D. Bowman's capsule

Q.583 ADH secretion is stimulated by decrease in blood pressure and blood volume which is detected by osmo-receptors in:

A. Kidneys
B. Posterior pituitary
C. Cerebral cortex
D. Hypothalamus

Q.584 Diuresis is reduced by:

A. Oxytocin
B. Prolactin
C. Luteinizing hormone
D. Vasopressin

Q.585 Which of the following plant hormone may be substitute for red light and promote flowering in long day plants while inhibit in short day plants?

A. Auxins
B. Gibberellins
C. Abscisic acid
D. Ethene

Q.586 α-amylase production is stimulated by:

A. IPA
B. GA3
C. GA
D. Cytokinins

Q.587 It is sprayed on tree crops to regulate fruit drop at the end of season:

A. IAA
B. GA
C. GA3
D. ABA

Q.588 Find the correct row of answers regarding hormone and its action.

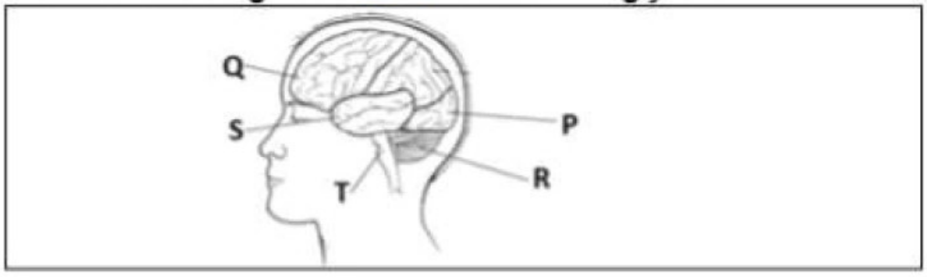
Option	Hormone	Action
A.	Abscisic acid	Closing of stomata
B.	Gibberellin	Fruit ripening
C.	Cytokinin	Early senescence
D.	Auxin	Induces dormancy

Q.589 Cytokinin hormone is related with:

I. Prevent senescence
II. Break seed dormancy
III. Promote cell division
IV. Parthenocarpy

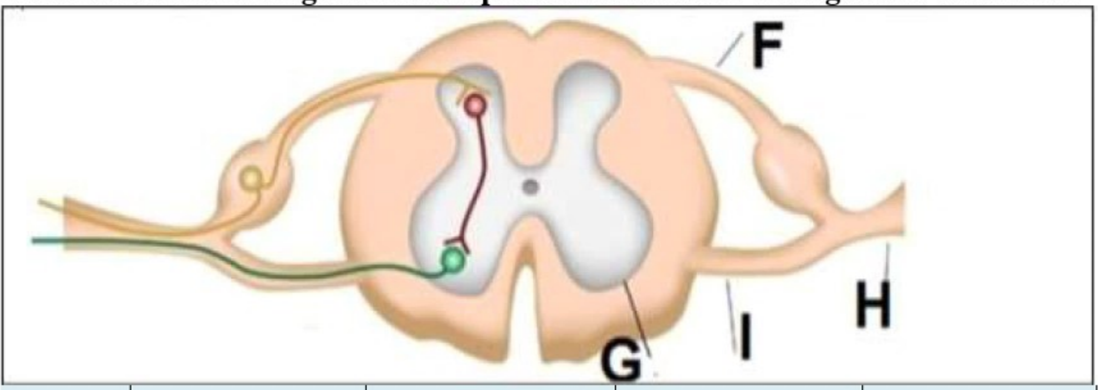
A. I, III, IV
B. II, III, IV
C. I, II, IV
D. I, II, III

Q.590 Observe the below diagram and answer accordingly.



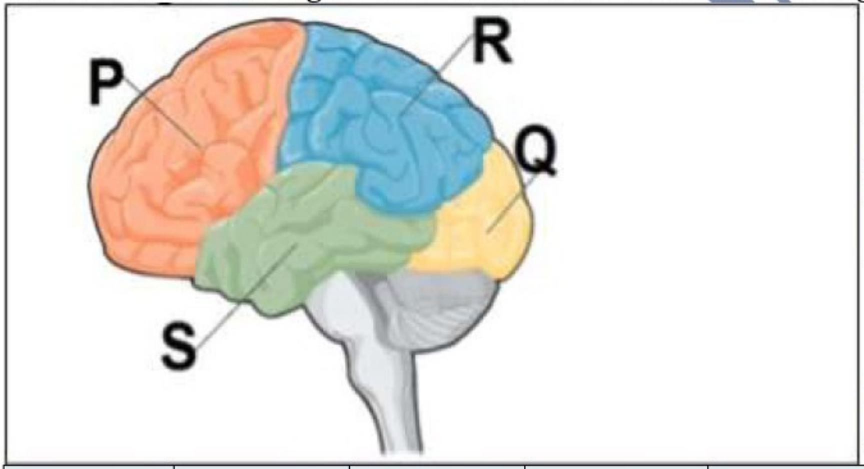
Option:	Balance of Body	Breathing reflex	Memory
A.	T	P	Q
B.	R	S	P
C.	R	T	Q
D.	Q	R	S

Q.591 Observe the below diagram about spinal cord and find the right row of answer.



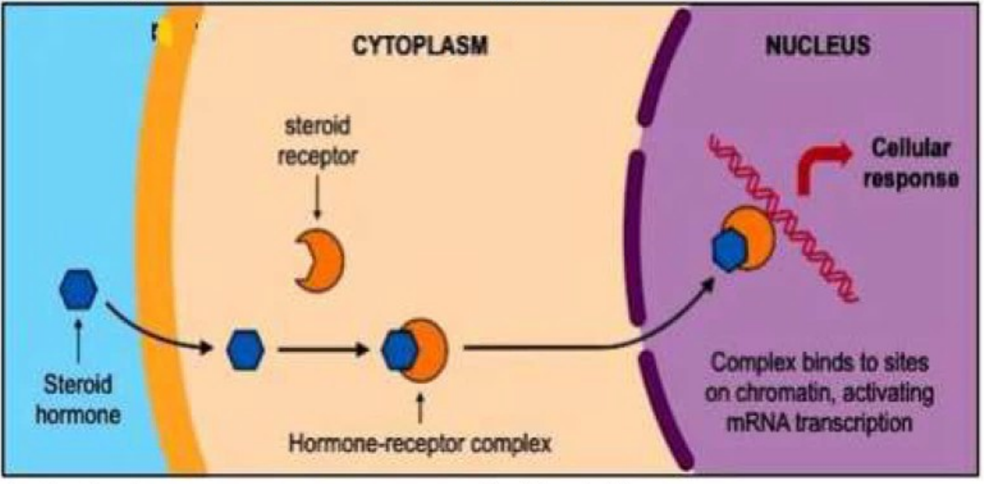
Option:	F	G	H	I
A.	Dorsal root	Gray matter	Cranial nerve	Ventral root
B.	Dorsal root	White matter	Spinal nerve	Ventral root
C.	Ventral root	Gray matter	Spinal nerve	Dorsal root
D.	Dorsal root	Gray matter	Spinal nerve	Ventral root

Q.592 Observe the below diagram about human brain and find the right row of answer.



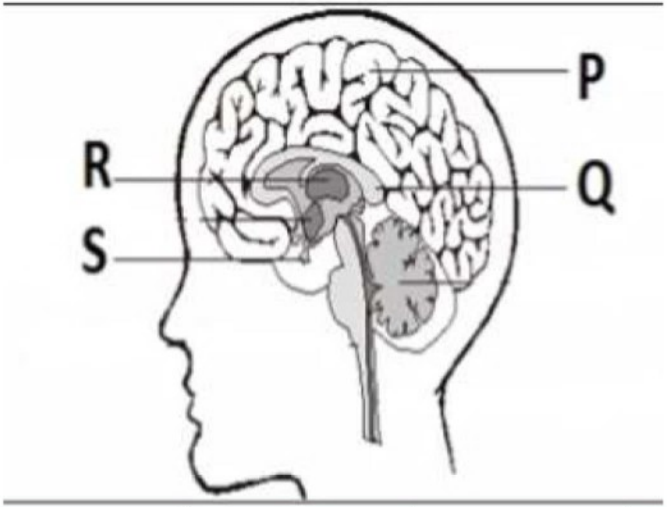
Option:	P	Q	R	S
A.	Frontal	Occipital	Parietal	Temporal
B.	Frontal	Occipital	Temporal	Parietal
C.	Occipital	Frontal	Temporal	Parietal
D.	Occipital	Frontal	Parietal	Temporal

Q.593 Observe the below diagram about model of hormone action and find the right answer accordingly.



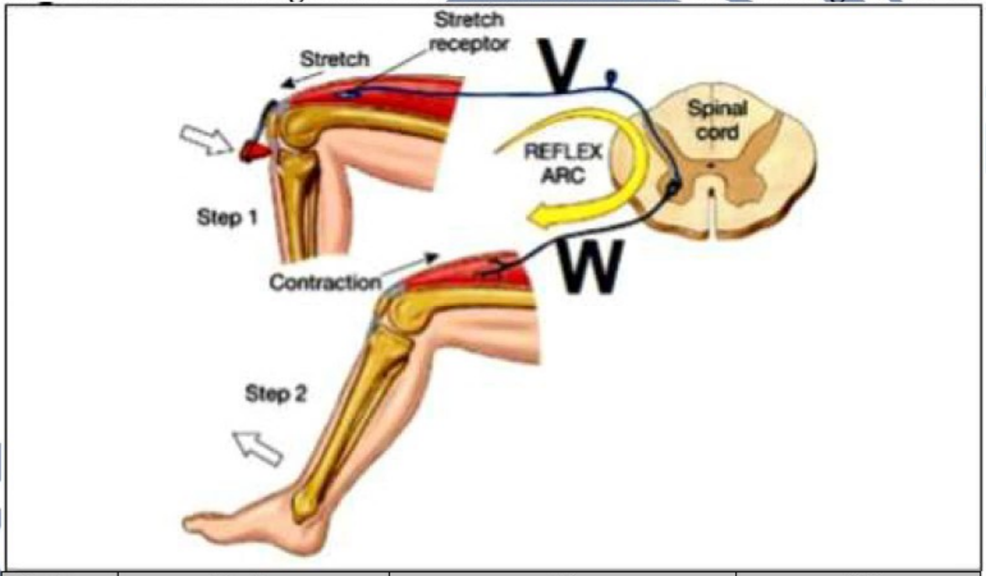
A. Amine hormone
B. Steroid hormone
C. Peptide hormone
D. Protein hormone

Q.594 Find the correct row in below diagram of human brain.



Option:	P	Q	R	S
A.	Cerebrum	Corpus callosum	Hypothalamus	Pituitary gland
B.	Cerebrum	Corpus callosum	Hypothalamus	Thalamus
C.	Cerebrum	Corpus callosum	Thalamus	Pituitary gland
D.	Cerebrum	Mid brain	Thalamus	Pituitary gland

Q.595 Observe the below diagram about reflex action and find the right row of answer.



Option:	Reflex	V	W
A.	Monosynaptic	Motor neuron	Sensory neuron
B.	Polysynaptic	Motor neuron	Sensory neuron
C.	Monosynaptic	Sensory neuron	Motor neuron
D.	Polysynaptic	Sensory neuron	Motor neuron

Q.596 ___F___ stimulates ___G___ to produce ___H___.

Option:	F	G	H
A.	Angiotensinogen	Adrenal cortex	Aldosterone
B.	Angiotensin	Adrenal medulla	Renin
C.	Renin	Adrenal cortex	Aldosterone
D.	Renin	Adrenal medulla	Adrenaline

Q.597 Which one of the following is incorrect about Pacinian corpuscle?

I) Located in epidermis **II) Encapsulated receptor**
III) Respond to pressure **IV) Onion like membranes**

A. I only
B. II only
C. III only
D. I, II, III and IV are correct

Q.598 Synapse is the region where the impulse moves from one neuron to another. During this phenomenon, the neurotransmitters bind to the receptors on the __________which generates action potential in ______.

A. post synaptic membrane; pre-synaptic membrane
B. pre-synaptic membrane; past-synaptic membrane
C. post-synaptic membrane; post-synaptic cell
D. pre-synaptic membrane; pre-synaptic membrane

Q.599 Which one of the following is sensitive to touch?
I. Meissner's corpuscles **II. Thermoreceptors** **III. Photoreceptors**
A. I only B. II only
C. III only D. I, II and III

Q.600 The outer area of spinal cord is__F__and inner area is__G__.

Option:	F	G
A.	Cerebral cortex	Cerebral medulla
B.	Cerebral medulla	Cerebral cortex
C.	White matter	Grey matter
D.	Grey matter	White matter

Q.601 Which one of the following is a wrong statement?
A. Receptor detects change in environment
B. Receptors are not present in joints
C. Receptor may be a cell or organ
D. Carotid artery has stretch receptors

Q.602 These are the structures which respond when they are stimulated by an impulse coming through motor neuron:
A. Muscles B. Thermo-receptors
C. Sensory neurons D. Pacinian corpuscles

Q.603 Most of the organelles in a neuron are located in:
A. Dendritic region B. Axon terminals
C. Axon D. Cell body

Q.604 These are supporting cells of the nervous system:
A. Neuron cells B. Ganglia
C. Glial cells D. Receptors

Q.605 Action potentials move along axons:
A. More slowly in axons of large than in small diameter
B. By the direct action of acetylcholine on the axonal membrane
C. More rapidly in myelinated than in non-myelinated axons
D. By reversing the concentration gradients for sodium and potassium ions

Q.606 Threshold stimulus is sufficient to generate:
A. Resting membrane potential B. Repolarization of neuron
C. Active membrane potential D. Recovery of neuron

Q.607 Nerve impulse is initiated by:
A. Influx of K^+ B. Out flux of K^+
C. Influx of Na^+ D. Out flux of Na^+

Q.608 Jump of impulse from one node of Ranvier to another in myelinated neurons is called:
A. Hyperpolarization B. Continuous impulse
C. Resting membrane potential D. Saltatory impulse

Q.609 Endocrine glands:
A. Are ductless B. Pour their secretion in blood
C. Are ductless D. All A, B, C

Q.610 All are amino acid derivatives except:
A. Thyroxin B. Aldosterone
C. Epinephrine D. Nor-epinephrine

Q.611 All of the following are true about hormones except:
A. Initiate new biochemical reactions
B. Inhibit some chemical reactions
C. Regulate enzymatic reactions
D. Control long term changes

Q.612 The islets of Langerhans have large number of _____ associated with production of _______.
A. α cells, insulin B. β cells, insulin
C. α cells, glucagon D. β cells, glucagon

Q.613 Excess production of _________can increase blood pressure by increasing blood volume.
A. ADH B. Nor-adrenaline
C. Adrenaline D. T_4

Q.614 Pick an exocrine gland:
A. Adrenal gland B. Pituitary gland
C. Sebaceous gland D. Placenta

Q.615 The hormonal secretion from islets of Langerhans are regulated by all except:
A. STH B. ACTH
C. MSH D. Blood glucose level

Q.616 Which of the following is the only anti-diabetic hormone present in human blood?
A. Glucagon B. Epinephrine
C. Cortisol D. Insulin

Q.617 The integrative system other than nervous system is:
A. Endocrine system B. Excretory system
C. Digestive system D. Respiratory system

Q.618 Clusters of neuron cell bodies within peripheral nervous system are:
A. Nuclei B. Ganglia
C. Laminae D. Fascicles

Q.619 Cerebrospinal fluid is present:
A. Between pia mater and arachnoid mater
B. Between dura mater and cranium
C. Between arachnoid and dura mater
D. Beneath pia mater

Q.620 Which of the following structures is present characteristically only in mammalian brain?
A. Corpus luteum B. Corpus striatum
C. Corpus fibrosum D. Corpus callosum

Q.621 Feelings of anger, pain, and pleasure are experienced through:
A. Frontal lobe B. Parietal lobe
C. Limbic system D. Reticular system

Q.622 ADH and oxytocin are synthesized by:
A. Pons B. Thalamus
C. Hypothalamus D. Pineal gland

Q.623 Myelin sheath of the nerve fibres of the CNS is produced and maintained by:
A. Astrocytes B. Microglia
C. Schwann cells D. Oligodendrocytes

Q.624 Which of this human organ is most affected due to shortage of oxygen?
A. Skin B. Brain
C. Kidney D. Intestine

Q.625 Memory weakens if one of the following parts is injured:
A. Medulla B. Cerebrum
C. Cerebellum D. Hypothalamus

Q.626 Hypothalamus does not control:
A. Libido B. Osmoregulation
C. Hunger and satiety D. Creative thinking and consciousness

Q.627 The spinal cord in man extends from the:
A. Medulla oblongata to the coccyx
B. Level of third cervical vertebrae to the coccyx
C. Level of the axis to the lowest lumber vertebra
D. Medulla oblongata to the level of the second lumbar vertebrae

Q.628 In spinal cord, white matter is:
A. Surrounded by gray matter B. Mixed with gray matter
C. Around the gray matter D. Absent

Q.629 How many pairs of cranial nerves in mammals are purely sensory?
A. Four B. Five
C. Two D. Three

Q.630 Which of these is not a reflex action?
A. Blinking of eyes due to strong light
B. Flexion due to needle prick
C. Secretion of sweat
D. Salivation

Q.631 The part of the nervous system that controls smooth muscle, cardiac muscle and gland is the:
A. Central nervous system B. Somatic nervous system
C. Autonomic nervous system D. Peripheral nervous system

Q.632 Which of the following two systems are opposite in action to each other?
A. Nervous – Sensory B. Nervous – Endocrine
C. Sensory – Endocrine D. Parasympathetic – Sympathetic

Q.633 The major function of Na−K pump is to:
A. Pump Na^+ into and K^+ out of the cell
B. Generate resting membrane potential
C. Maintain concentration gradients of Na^+ and K^+ across the plasma membrane
D. Oppose any tendency of the cell to undergo hyperpolarization

Q.634 The effects of sympathetic and parasympathetic fibres are cooperative in the:
A. Heart B. Eyes
C. Digestive system D. Reproductive system

Q.635 The transmission of impulse through neurons is a:
A. Tactile phenomenon B. Chemical phenomenon
C. Gravitational phenomenon D. Electrochemical phenomenon

Q.636 The energy required during transmission of impulse is provided by:
A. Brain
B. Liver
C. Nerve fibre
D. Blood

Q.637 Resting potential of a nerve is:
A. -30 mV
B. -70 mV
C. +70 mV
D. +30 mV

Q.638 In a nerve, if sodium pump is blocked, which of the following is most likely to happen?
A. Na$^+$ outside the cell will increase
B. K$^+$ inside the nerve will increase
C. Na$^+$ inside the nerve will increase
D. Na$^+$ and K$^+$ will increase outside the cell

Q.639 A nerve impulse will travel through a nerve fibre only if its membrane suddenly becomes more permeable to:
A. Sodium ions
B. Calcium ions
C. Chloride ions
D. Potassium ions

Q.640 Synaptic vesicle is found in:
A. Pre-synaptic neuron
B. Post-synaptic neuron
C. Synaptic cleft
D. Synaptic gutter

Q.641 The neurotransmitters released into the synapse between neurons and muscle cells that produces and EPSP in the skeletal muscle cell is:
A. GABA
B. Epinephrine
C. Nor-epinephrine
D. Acetylcholine

Q.642 Among which of the following group of chemicals, all are neurotransmitters:
A. Glycine, dopamine, melatonin
B. Somatostatin, serotonin, acetylcholine
C. Noradrenaline, somatostatin, threonine
D. Acetylcholine, noradrenaline, dopamine

Q.643 An action potential in the nerve fibre is produced when positive and negative charges on the outside and inside of the axon membrane are reversed because:
A. More K$^+$ ions enter the axon as compared to Na$^+$ ions leaving it
B. More Na$^+$ ions enter the axon as compared to K$^+$ ions leaving it
C. All potassium ions leave the axon
D. All sodium ions enter the axon

Q.644 Which of the following does not act as a neurotransmitter?
A. Tyrosine
B. Epinephrine
C. Acetylcholine
D. Glutamic acid

Q.645 Hormones are distributed in the body from their place of origin through:
A. Venous blood
B. Arterial blood
C. Cytoplasm
D. Duct

Q.646 The target cells of a hormone always have:
A. Undifferentiated cytoplasm
B. Special receptor to which hormone binds
C. Special channels through which hormone moves
D. Large amount of hormone stored within vesicles

Q.647 Which of the following hormone is a modified amino acid?
A. MSH
B. Estrogen
C. Epinephrine
D. Prostaglandins

Q.648 Receptors for proteinaceous hormones are located on/in:
A. Nucleus
B. Cytoplasm
C. Cell surface membrane
D. Cisternal membranes

Q.649 Which of the following act as second messenger in hormonal action?
A. cAMP
B. ADP
C. NAD$^+$
D. ATP

Q.650 According to accepted concept of hormonal action, if receptor molecules are removed from the target organs, then the target organ will:
A. Continue to respond to hormone but in opposite way
B. Continue to respond to hormone without any difference
C. Continue to respond to hormone but will require in higher concentration
D. Not respond to the hormone

Q.651 The secretion of hormones from anterior pituitary are regulated by the factors from the:
A. Brain
B. Kidney
C. Hypothalamus
D. Posterior pituitary

Q.652 If the pituitary gland of an adult rat is surgically removed, which of the following endocrine glands will be least affected?
A. Thyroid
B. Gonads
C. Adrenal cortex
D. Adrenal medulla

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Q.653 Growth hormone of pituitary is more effective only in the:
A. Absence of insulin B. Absence of thyroxin
C. Presence of adrenaline D. Presence of thyroxin

Q.654 A gorilla-like appearance with huge hands and legs is due to excess secretion of:
A. LH B. STH
C. LTH D. TSH

Q.655 All of the following hormones exert a trophic effect except:
A. LH B. TSH
C. ACTH D. Prolactin

Q.656 Calcium ion stimulates blood clotting increase in bleeding time and delay in blood coagulation is due to the deficiency of which hormone?
A. Thyroxin B. Adrenalin
C. Inhibin D. Parathormone

Q.657 Which of the following hormones has no control over gluconeogenesis?
A. Insulin B. Glucagon
C. Aldosterone D. Corticosterone

Q.658 Destruction of adrenal cortex leads to:
A. Grave's disease B. Addison's disease
C. Simmond's disease D. Cushing syndrome

Q.659 A woman started developing male characters. It may be due to:
A. Damage to posterior pituitary B. Damage to mammary glands
C. Over-production of estrogen D. Over-production of adrenal androgens

Q.660 Which of the endocrine gland is taken as an extension of sympathetic nervous system?
A. Pineal gland B. Adrenal cortex
C. Adrenal medulla D. Neurohypophysis

Q.661 Hormones secreted by the adrenal medulla are:
A. Steroids B. Proteinaceous
C. Catecholamine D. Polypeptides

Q.662 Which of these terms best describes the interactions of insulin and glucagon?
A. Synergistic B. Permissive
C. Antagonistic D. Cooperative

Q.663 If a person who has diabetes mellitus has forgotten to take an insulin injection, the symptoms that may soon appear include:
A. Acidosis B. Hyperglycemia
C. Polyuria D. All A, B, C

Q.664 Synthesis of testosterone by Leydig cells is stimulated by:
A. LTH B. GnRH
C. FSH D. ICSH

Q.665 Biological actions of estrogens include all of the following except:
A. Decreased glucose tolerance B. Increased serum cholesterol
C. Stimulation of follicular growth D. Delayed bone loss at menopause

Q.666 Which hormone is produced in human female if a pregnancy has occurred?
A. LH B. hCG
C. Estrogen D. Progesterone

Q.667 All of the following may act as receptors except:
A. Nerve ending B. Cone cells in retina
C. Meissner corpuscles D. Muscles

Q.668 Stretch receptors have role in:
A. Detection of light B. Regulation of blood pressure
C. Hunger arousal D. Sensation of touch

Q.669 Maintenance of RMP, after hyperpolarization, in a neuron is due to:
A. K^+ pump B. Na^+ channel
C. Na^-K pump D. Ca^+ channel

Q.670 Neuroglial cell performs all of the following functions except:
A. Nutrition to neurons B. Division of neurons
C. Protection of neurons D. Formation of myelin sheath

Q.671 A motor neuron usually has:
A. Single short axon B. Multiple short axons
C. Multiple long axons D. Single long Axon

Q.672 Unidirectional transmission of the nerve impulse is maintained by:
A. Inter-neurons B. Synapse
C. Myelin Sheath D. Membrane Polarity

Q.673 Chemicals called _____ are involved in the transmission of impulses at chemical synapse:
A. Neurotransmitters B. Receptors
C. Neuro-hormones D. Interferons

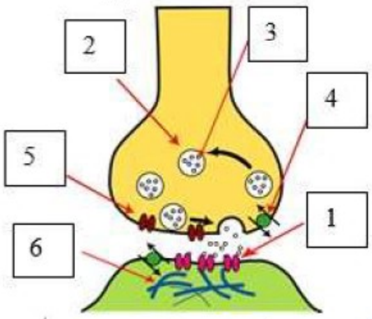
Q.674 Neurons once mature do not divide further because they are present in:
A. G1-phase B. S-phase
C. G2-phase D. G0-phase

Q.675 Choose the correct pair:
A. Reflex arc – Direction B. Motor neuron – Dorsal root ganglia
C. Reflex action – Involuntary D. Sensory neuron – Ventral root ganglia

Q.676 In neuron, the charge separating barrier is:
A. Nissl's granule B. Plasma membrane
C. Dendrite D. Ganglia

Q.677 In sensory neuron, stimuli are received by:
A. Axons B. Cell body
C. Dendron D. Myelin sheath

Q.678 A diagram showing axon terminal and synapse is given. Identify the correct option:



A. 2-Synaptic connections, 5-K^+ B. 1-Neurotransmitter, 6-Synaptic cleft
C. 1-Receptor, 3- Synaptic vesicles D. 2-Neurotransmitter, 4- Ca^{++}

Q.679 When Sodium/Potassium pump is in action, how many ions move outside in one go?
A. 5 B. 3
C. 2 D. 10

Q.680 During the resting potential of a neuron, which of the following is least likely to be found in large quantities inside the neuron cell?
A. Na^+ ions B. Negative charged anions
C. K^+ ions D. Zwitter ions

Q.681 Which of the followings should have the fastest conduction velocity?
A. Unmyelinated, small-diameter nerve B. Unmyelinated, large-diameter nerve
C. Myelinated, small-diameter nerve D. Myelinated, large-diameter nerve

Q.682 In humans, this part is called as emotion center of brain:
A. Thalamus B. Amygdala
C. Hypothalamus D. Pons

Q.683 Lobes are present in:
A. Hypothalamus B. Cerebrum
C. Pons D. Amygdala

Q.684 CSF circulates in all of the following parts except:
A. Lateral ventricles B. Corpus callosum
C. Dorsal ventricles D. Central canal

Q.685 Preparing the body for the "fight-or-flight" response is the role of:
A. Sympathetic nervous system B. Autonomic nervous system
C. Parasympathetic nervous system D. Somatic nervous system

Q.686 Vagus nerve arises from:
A. Cervical region B. Lumbar region
C. Thoracic region D. Brain

Q.687 Bundle of axons or dendrites bounded by connective tissue inside CNS is:
A. Nerve B. Tract
C. Ganglion D. Nucleus

Q.688 Gray matter contains:
A. Myelinated cell bodies only
B. Myelinated cell processes only
C. Cell bodies and unmyelinated cell processes
D. Cell bodies and myelinated cell processes

Q.689 At neuromuscular junction, synaptic vesicles release:
A. Serotonin B. GABA
C. Dopamine D. Acetylcholine

Q.690 Protective membranous coverings around brain are called:
A. Skull B. Meninges
C. CSF D. Ventricles

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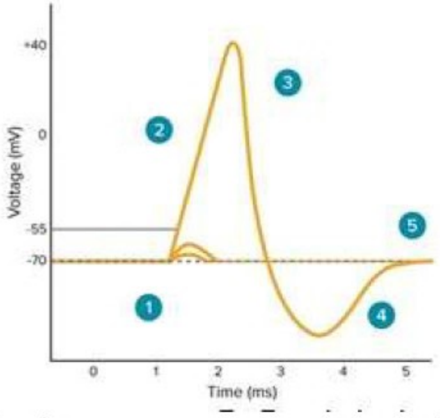
Q.691 Number 2 represents:



A. Depolarization B. Repolarization
C. Refractory period D. Hyperpolarization

Q.692 All of the following are the functions of hormones except:
A. Non-nutrient chemicals B. Produced in traces
C. Intercellular messengers D. Can initiate biochemical reaction

Q.693 All are true about hormones except:
A. Organic in nature
B. Transported by blood
C. Secretion is controlled by positive feedback mechanism
D. Produced by different body parts

Q.694 Chemically hormones can be all except:
A. Proteins B. Polypeptides
C. Steroids D. Nucleic acids

Q.695 Hypothalamus controls posterior lobe of pituitary gland by:
A. Stimulating factors B. Neuronal supply
C. Inhibitory factors D. Blood supply

Q.696 Growth hormone releasing hormone is produced by _______ and influences ______ respectively.
A. Hypothalamus, Pituitary gland
B. Hypothalamus, Anterior lobe of Pituitary gland
C. Posterior lobe of pituitary, Nerve endings of hypothalamus
D. Hypothalamus, Posterior lobe of pituitary gland

Q.697 Hypothalamus directly regulates the ______ gland:
A. Pituitary B. Thymus
C. Thyroid D. Pancreas

Q.698 An example of primary hormone is:
A. STH B. FSH
C. Prolactin D. LH

Q.699 Release of CRF from hypothalamus is regulated by the levels of all except:
A. Stress B. STH
C. Steroids D. ACTH

Q.700 Common hypothalamic releasing factor that would affect gonads indirectly:
A. PIH B. GnRH
C. MIH D. CRF

Q.701 Melatonin is the secretion produced by:
A. Median lobe of pituitary gland B. Thymus gland
C. Pineal gland D. Gonads

Q.702 Select the answer which correctly matches the endocrine gland with the hormone it secretes and its function/deficiency symptom.

	Endocrine gland	**Hormone**	**Function/deficiency symptoms**
A.	Anterior pituitary	Oxytocin	Stimulates uterus contraction during child birth
B.	Posterior pituitary	Growth hormone (GH)	Over secretion stimulates
C.	Thyroid goiter	Thyroxin	Lack of iodine in diet results in
D.	Corpus luteum	Testosterone	Stimulates spermateogesis

Q.703 Estrogen secretion is controlled by:
A. FSH only B. LH & FSH
C. LH only D. LH & Prolactin

Q.704 It is an autoimmune disorder:
A. Cretinism B. Addison’s disease
C. Grave’s disease D. Cushing’s disease

Q.705 Identify which of the following thyroid hormone is not under the influence of TSH:
A. Thyroxine
B. Tetraiodo-thyonine
C. Thyronine
D. Calcitonin

Q.706 Over secretion of parathormone will result in all of the followings except:
A. Demineralization of bones
B. Tetany
C. Rickets
D. Kidney stones

Q.707 It is not true about glucagon:
A. It increase breakdown of fats
B. Produced by α-cells
C. It increases formation of proteins
D. Antagonistic to insulin

Q.708 The effect of adrenaline on heart is:
A. Valvular closure
B. Increasing blood pressure
C. Increasing cardiac output
D. Shivering thermogenesis

Q.709 Diabetes insipidus is due to:
A. Higher levels of Insulin
B. Decreased ADH
C. Increased blood glucose
D. Increased glucagon

Q.710 It is not the function of oxytocin:
A. Induce labor pain
B. Milk ejection
C. Contraction of uterus
D. Maturation of follicles

Q.711 Under the influence of which hormone uterine wall gains maximum thickness?
A. LH
B. Progesterone
C. Estrogen
D. Oxytocin

Q.712 It is not the effect of GH:
A. Increased growth
B. Increased blood pressure
C. Increased bone development
D. Increased cell division

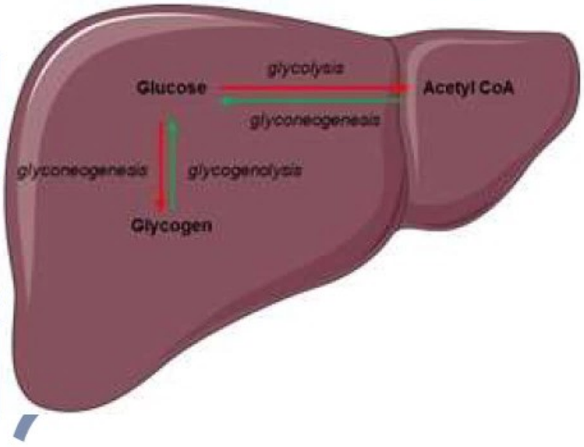
Q.713 Under secretion of progesterone during pregnancy leads to:
A. Miscarriage
B. Early menstruation
C. Polycystic ovaries
D. Decreased chances of pregnancy

Q.714 Levels of testosterone becomes constant in human male:
A. Before birth
B. Before puberty
C. After birth
D. After puberty

Q.715 Select the incorrect matching of hormone, its source and its function:

	Hormone	**Source**	**Function**
A.	STH	Anterior Pituitary	Growth & development
B.	Cortisol	Adrenal cortex	Protein breakdown
C.	Testosterone	Testes	Secondary male characters
D.	Estrogen	Ovaries	Ripening of follicles

Q.716 Glucose metabolism shown in diagram is carried out by:



A. Insulin, Cortisol
B. Epinephrine, Norepinephrine
C. Glucagon, Cortisol
D. Glucagon, Insulin

Q.717 It is the main coordinating system of human body:
A. Respiratory system
B. Nervous system
C. Hormonal system
D. Circulatory system

Q.718 The mechanisms that is found in animals only:
A. Diffusion
B. Nervous control
C. Respiration
D. Hormonal control

Q.719 Receptors in ear for detection of sound are examples of
A. Chemoreceptors
B. Thermoreceptors
C. Mechanoreceptors
D. Nociceptor

Q.720 Which of the following type of receptors are also called as ‘electromagnetic receptors?
A. Chemoreceptors
B. Mechanoreceptorsq
C. Nociceptors
D. Photoreceptors

Q.721 All of the following structures are found in axoplasm except:
A. Nucleus B. Microtubules
C. Neurofibrils D. Mitochondria

Q.722 Intermediate or relay neurons are also called as:
A. Sensory neurons B. Motor neurons
C. Associative neurons D. Glial cells

Q.723 Axonal and dendrital fibers can regenerate if _________ is intact:
A. Myelin sheath B. Cell body
C. Cell processes D. Nissl's granules

Q.724 Which of the following types of neurons are found in human central nervous system?
A. Sensory neurons B. Motor neurons
C. Associative neurons D. All A, B, C

Q.725 How many axons will be present in a multipolar neuron
A. Multiple B. No axon
C. 1 D. 4

Q.726 Single long dendron is a character of:
A. Sensory neuron B. Associative neuron
C. Motor neuron D. All A, B, C

Q.727 For sound (gooD. reflex action, we require intact:
A. Spinal cord B. Cerebellum
C. Hypothalamus D. Medulla oblogata

Q.728 Nerve impulse in neuron is initiated by the opening of:
A. Na – gate B. K – gate
C. Cl – channel D. Na-K pump

Q.729 The normal speed of nerve impulse in humans is:
A. 90 m/s B. 100 m/s
C. 110 m/s D. 120 m/s

Q.730 Leakage of K^+ ions out of neuron cell is an example of:
A. Diffusion B. Osmosis
C. Active transport D. Facilitated diffusion

Q.731 All of the following are true about resting membrane potential except:
A. Electrically positive outside B. Electrically negative inside
C. Non-conducting neuron D. Neuron at neutral state

Q.732 Transport through Na-K pump is:
A. Direct active transport B. Indirect active transport
C. Facilitated diffusion D. Carrier mediated transport

Q.733 Communication between two neurons at synapse is made through:
A. Cytoplasmic connections B. Microscopic gaps
C. Neurotransmitters D. Plasmodesmata

Q.734 Synaptic vesicles fuse with pre-synaptic membrane and release neurotransmitter molecules into:
A. Cell body of pre-synaptic neuron B. Cell body of post-synaptic neuron
C. Synaptic cleft D. Synaptic knob

Q.735 Neuromuscular junction is an example of:
A. Physical synapse B. Electrical synapse
C. Chemical synapse D. Biological synapse

Q.736 It is the main neurotransmitter for synapses that lie outside the central nervous system:
A. Acetylcholine B. Adrenalin
C. Serotonin D. Dopamine

Q.737 ____________ controls rate and pattern of breathing:
A. Cerebrum B. Cerebellum
C. Pons D. Thalamus

Q.738 Pick the second largest part of human brain:
A. Medulla B. Thalamus
C. Cerebrum D. Cerebellum

Q.739 Following are the parts of hind brain, EXCEPT:
A.Medulla oblongata B. Pons
C. Cerebellum D. Thalamus

Q.740 Pick the reduced part of human brain:
A. Fore brain B. Mid brain
C. Hind brain D. Spinal cord

Q.741 Which of the following acts as relay station for auditory impulses?
A. Pons B. Limbic system
C. Mid brain D. Hypothalamus

Q.742 It narrows down into an oval Shaped hollow cylinder, the spinal cord:
A. Pons B. Cerebellum
C. Medulla oblongata D. Thalamus

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Q.743 A band of axons between two cerebral hemispheres is termed as:

A. Cerebrum
B. Hemisphere band
C. Corpus luteum
D. Corpus callosum

Q.744 How many layers of meninges protect the spinal cord?

A. 2
B. 3
C. 4
D. 5

Q.745 The feeling of fear and rage is produced by:

A. Medulla
B. Hippocampus
C. Hypothalamus
D. Amygdala

Q.746 There are____________ cranial nerves in human body:

A. 10
B. 31
C. 24
D. 86

Q.747 Contraction of the pupils, promotion of digestion of food and retardation of heart beat are indications of a:

A. Relaxed state of body
B. State of disease or infection
C. State of fear or rage
D. Emergency state of body

Q.748 Perching behavior in birds is due to advanced:

A. Thalamus
B. Cerebellum
C. Cerebrum
D. Pons

Q.749 _________ make up as much as half of nervous system:

A. Interneurons
B. Motor neurons
C. Sensory neurons
D. Neuroglia

Q.750 The word hormone means:

A. Exciting
B. Inhibiting
C. Stimulating
D. Diminishing

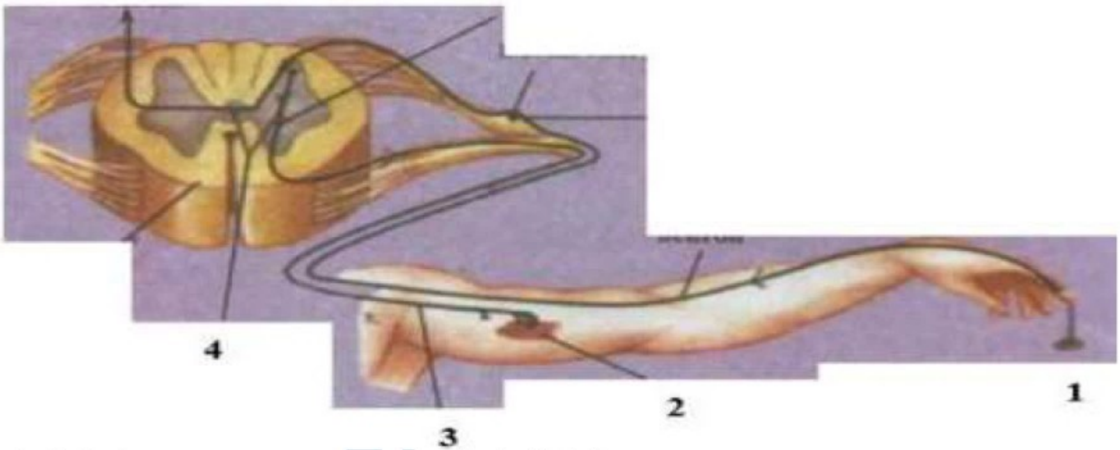
Q.751 The post synaptic membrane receives the action potential from:

A. Presynaptic membrane
B. Synaptic membrane
C. Synaptic knobs
D. Neurotransmitter molecules

Q.752 Restoration of original ion gradient across the cell membrane of nerve cell is called:

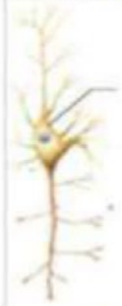
A. Polarization
B. Depolarization
C. Repolarization
D. Recovery

Q.753 What will be the correct direction of flow of nerve impulse in following diagram?



A. 1, 2, 3, 4
B. 1, 4, 3, 2
C. 1, 2, 4, 3
D. 4, 3, 2, 1

Q.754 In which one of the following types of nerve cells saltatory impulse moves?

A)


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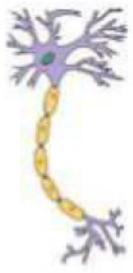

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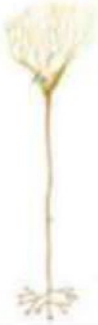
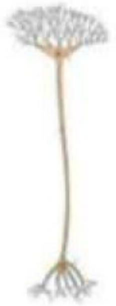


D)


Q.755 A neuron cannot regenerate its:
A. Axons B. Dendrites
C. Cell body D. Dendron

Q.756 Following components of nervous system work as coordinator, EXCEPT:
A. PNS B. Brain
C. Spinal cord D. Ganglia

Q.757 Human being have the most developed, advanced and evolved:
A. Sensory system B. Nervous system
C. Cerebellum D. Respiratory system

Q.758 _____________involve highly specialized cells:
A. Hormonal coordination B. Animal coordination
C. Chemical coordination D. Nervous coordination

Q.759 Receptors as a component of human nervous system represent the following three structural levels, EXCEPT:
A. Cell B. Organ
C. Tissue D. Organelle

Q.760 Pick up the correct combination:
A. Gustation — Touch B. Olfaction — Smell
C. Audition — Taste D. Taction — Hearing

Q.761 Human ears are associated with:
A. Audition and equilibrium B. Gustation and equilibrium
C. Audition and body position D. Gustation and body position

Q.762 Following are mechanoreceptors, EXCEPT:
A. Baroreceptors B. Osmoreceptors
C. Meissner's corpuscles D. Pacinian corpuscles

Q.763 _____________ are mostly located in the skin:
A. Nociceptors B. Mechanoreceptors
C. Thermoreceptors D. Chemoreceptors

Q.764 Detection of the damage to the body tissues is called:
A. Osmoreception B. Chemoreception
C. Baroreception D. Nociception

Q.765 The cell body or cyton contains nucleus and following cellular organelles, EXCEPT:
A. Centrioles B. Mitochondria
C. Golgi bodies D. Endoplasmic reticulum

Q.766 Nissl's granules are absent in following parts of neuron, EXCEPT:
A. Axon B. Dendron
C. Soma D. Dendrites

Q.767 Neurons are, nourished, protected and supported by:
A. Schwann cells B. Glial cells
C. Nerve cells D. Oligodendrocytes

Q.768 Peripheral axon is the characteristic of:
A. Unipolar neuron B. Biopolar neuron
C. Multipolar neuron D. Apolar neuron

Q.769 Velocity of impulse depends upon the following features of a neuron, EXCEPT:
A. Thickness of axon B. Length of axon
C. Presence of myelin sheath D. Number of dendrites

Q.770 The _______________ are found specially in dorsal root of spinal cord:
A. Motor neurons B. Unipolar neurons
C. Bipolar neurons D. Multipolar neurons

Q.771 _____________ are found only in brain and spinal cord:
A. Motor neurons B. Unipolar neurons
C. Associated neurons D. Sensory neurons

Q.772 Non-myelinated neurons are:
A. Motor neurons B. Inter neurons
C. Sensory neurons D. Unipolar neurons

Q.773 Reflexes are never.
A. Involuntary B. Immediate
C. Automatic D. Meditated

Q.774 Reflex travels through a/an:
A. Linear pathway B. Parallel pathway
C. Antiparallel pathway D. Zigzag pathway

Q.775 Reflexes have no involvement of:
A. Conscious portion of brain B. Autonomic nervous system
C. Unconscious portion of brain D. Grey matter of spinal cord

Q.776 Most of the time, neurilemma maintains:
A. Resting membrane potential
B. membrane potential
C. + 50 mv membrane potential
D. + 0.05v membrane potential

Q.777 The peak of action potential is called:
A. Spike potential
B. Membrane potential
C. Electric potential
D. Chemical potential

Q.778 The depolarized state of neurilemma lasts for.
A. One second
B. Few seconds
C. One millisecond
D. Few milliseconds

Q.779 Action potential flows as a wave across:
A. Non-myelinated neuron
C. Unipolar neuron
B. Myelinated neuron
D. Motor neuron

Q.780 After the peak of action potential:
A. The permeability of Na^+ increases
B. The permeability of Na^+ decreases
C. The permeability K^+ decreases
D. Gated channels for K^+ close

Q.781 The cell body of a motor neuron lies within the:
A. Spinal cord
B. Brain
C. CNS
D. PNS

Q.782 Myelin sheath is made largely of:
A. Lipids
B. Proteins
C. Lipoproteins
D. Glycoproteins

Q.783 In humans:
A. Majority of the sensory and motor neurons are myelinated
B. All of the sensory and motor neurons are myelinated
C. A reasonable number of sensory and motor neurons are myelinated
D. A fraction of sensory and motor neurons are myelinated

Q.784 In sensory neurons:
A. Dendron is often shorter than axon
B. Dendron is often longer than axon
C. Cell body lies at terminal position
D. Cell body lies in between the cytoplasmic processes

Q.785 Serotonin and dopamine affect the following activities, EXCEPT:
A. Sleep
B. Mood
C. Learning
D. Heart beat

Q.786 A shallow groove in the cerebral cortex is called _____ whereas a deep groove is called _____
A. Sulcus, fissure
B. Fissure, sulcus
C. Sulcus, gyrus
D. Gyrus: sulcus

Q.787 Hormone that may have a primary role in many circadian rhythms:
A. Adrenaline
B. Melatonin
C. Insulin
D. Epinephrine

Q.788 Oxytocin production during labor is an example of:
A. Negative feed back mechanism
B. Positive feed back mechanism
C. Feedback inhibition
D. Precursor activation

Q.789 The hormone which is a major constituent of birth control pill:
A. LH
B. Oestrogen
C. Testosterone
D. Progesterone

Q.790 Secondary source of secretion of progesterone is:
A. Follicle
B. Placenta
C. Corpus luteum
D. Interstitial cells

Q.791 The organic compounds of varying structural complexity associated with regulation of chemical reactions are:
A. Enzymes
B. Coenzymes
C. Hormones
D. Co-factors

Q.792 Pick up non-steroidal hormone:
A. Androgen
B. Estrogen
C. Aldosterone
D. Oxytocin

Q.793 It is here that many of the sensory stimuli of nervous system are converted into hormonal responses:
A. Hypothalamus
B. Pituitary gland
C. Adrenal gland
D. Thyroid gland

Q.794 Pick up the hormones which are polypeptides in nature:
A. Insulin and glucagon
B. ADH and oxytocin
C. Thyroxine, epinephrine and non-epinephrine
D. Testosterone and cortisol

Q.795 Pick up unpaired endocrine gland:
A. Gonad B. Adrenal
C. Parathyroid D. Pituitary

Q.796 Excess of thyroxine produces a condition called:
A. Myxoedema B. Goiter
C. Grave's disease D. Cretinism

Q.797 The lack of vasopressin produces:
A. Diabetes insipidus B. Diabetes mellitus
C. Antidiuresis D. Conservation of water

Q.798 Islets of Langerhans have a large number of _______ cells which secrete______:
A. α, glucagon B. β, glucagon
C. α, insulin D. β, insulin

Q.799 Prolactin stimulates:
A. Milk ejection B. Release of milk
C. Milk production D. Degeneration of corpus luteum

Q.800 Hypoglycaemia may occur as a result of:
A. Excess of insulin B. Excess of glucagon
C. Excess of cortisol D. Excess of glucocorticoid hormone

Q.801 Select the correct matching of a hormone, its source and function:

	Hormone	Source	Function
A.	Vasopressin	Posterior pituitary	Increases loss of water through urine
B.	Norepinephrine	Adrenal medulla	Increases heartbeat, rate of respiration and alertness
C.	Glucagon	Beta-cells of Islets of Langerhans	Stimulates glycogenolysis
D.	Prolactin	Posterior pituitary	Regulates growth of mammary glands and milk formation females

Q.802 It prevents the loss of Na^+ from the kidney tubules:
A. Cortisol B. Corticosterone
C. Aldosterone D. Androgen

Q.803 Maintenance of level of glucose in the blood is:
A. Positive feedback B. Negative feedback
C. Reflex action D. Feedback inhibition

Q.804 When acidic food touches the lining of duodenum, it secretes a hormone called:
A. Gastrin B. Secretin
C. Melatonin D. Somatostatin

Q.805 Calcitonin is antagonistic to:
A. Aldosterone B. Thyroxine
C. Parathormone D. Corticosterone

Q.806 Ripening follicle secretes:
A. Progesterone B. FSH
C. Estrogen D. Androgen

Q.807 Pituitary gland attached to hypothalamus by a stalk called:
A. Placenta B. Infundibulum
C. Cord D. Funicle

Q.808 In male luteinizing hormones is called:
A. Follicle stimulating hormone B. Interstitial cell stimulating hormone
C. Luteotropic hormone D. Prolactin inhibiting hormone

Q.809 Too much cortical hormones are produced in:
A. Grave's disease B. Cushing's disease
C. Addison's disease D. Parkinson's disease

Q.810 The adrenal medulla produces:
A. Aldosterone B. Calcitonin
C. Epinephrine D. Estrogen

Q.811 It is a type of interaction in which a controlling mechanism is itself controlled by the product of reaction it is controlling:
A. Counter current mechanism B. Feedback mechanism
C. Precursor mechanism D. Induce fit mechanism

Q.812 The glands which secrete other substances such as digestive enzymes, milk, sweat, bile and route their secretion to specific destinations by means of ducts are called:
A. Endocrine glands B. Exocrine glands
C. Ductless glands D. Autocrine glands

Q.813 Pick up the exclusively glucocorticoid hormone:
A. Cortisol B. Corticosterone
C. Aldosterone D. Androgen

Q.814 It controls basal metabolic rate:
A. Cortisol B. Parathormone
C. Calcitonin D. Thyroxine

Q.815 __________ acts synergistically with ____________maintain the corpus luteum: to
A. LH, prolactin B. FSH, prolactin
C. LH, LTH D. ICSH, oxytocin

Q.816 ___________would lead to a progressive demineralization of the bones:
A. Over activity of thyroid B. Over activity of adrenal cortex
C. Over activity of parathyroid D. Deficiency of parathyroid

Q.817 Decrease in blood pressure, blood volume, and osmotic pressure of the blood causes the secretion of:
A. MSH B. Oxytocin
C. Vasopressin D. TSH

Q.818 A hormone which is produced by the ruptured follicle in response to LH from the pituitary is:
A. Estrogens B. Progesterone
C. Androgens D. FSH

Q.819 The type of feedback mechanism (FBM) in which increase in production of a substance increases the operation to produce more products, is called:
A. Feedback inhibition B. Feedback activation
C. Negative feedback mechanism D. Positive feedback mechanism

Q.820 Following hormones are included in steroids category, EXCEPT:
A. Oestrogens B. Testosterone
C. Cortisone D. ADH

Q.821 ________is the centre for conversion of ________
A. Cerebellum, sensory stimuli into hormonal responses
B. Thalamus, sensory stimuli into hormonal responses
C. Pons, sensory stimuli into hormonal responses
D. Hypothalamus, sensory stimuli into hormonal responses

Q.822 Gigantism is caused by:
A. Under secretion of STH before puberty B. Under secretion of STH after puberty
C. Over secretion of STH before puberty D. Over secretion of STH after puberty

Q.823 The blood calcium level is lowered by the deficiency of:
A. Adrenaline B. Parathormone
C. Thyroxine D. Calcitonin

Q.824 Alpha cells of pancreas secrete:
A. Insulin B. ADH
C. Glucagon D. Aldosterone

Q.825 Their receptors are present in cytoplasm or nucleus:
A. Peptide hormones B. Protein hormones
C. Amino acids derivative hormones D. Steroid hormones

Q.826 Both of them are secreted in stress situations:
A. Aldosterone and corticosterone
B. Androgen and aldosterone
C. Glucocofficoid and mineralocorticoid
D. Adrenaline and nor-adrenaline

Q.827 ADH is to __________, as insulin is to______
A. Diabetes mellitus, myxoedema B. Diabetes mellitus, diabetes insipidus
C. Cretinism, Diabetes insipidus D. Diabetes insipidus, diabetes mellitus

Q.828 Primary action of oxytocin is on:
A. Skeletal muscle B. Striated muscle
C. Cardiac muscle D. Smooth muscle

Q.829 All of the followings are produced by the thyroid gland, EXCEPT:
A. T_3 B. T_4
C. T_2 D. Parathormone

Q.830 ______exerts positive feedback which results in a sharp rise in _____output by the pituitary:
A. Oestrogen, Progesterone B. Progesterone, LH
C. LH, Oestrogen D. Oestrogen, LH

Q.831 Identify endocrine gland:
A. Salivary gland B. Sweat gland
C. Adrenal gland D. Pancreas

Q.832 Low calcium in the body fluid may be the cause of:
A. Tetany B. Kidney stones
C. Anemia D. Goiter

Q.833 It increases the rate of breakdown of fats:
A. Glucagon B. Insulin
C. Cortisol D. Aldosterone

Q.834 Failure to produce insulin leads to a condition called:

A. Diabetes insipidus B. Diabetes mellitus
C. Addison's disease D. Cushing's disease

Q.835 Development of secondary male characteristics is caused by:

A. Androgens B. Aldosterone
C. Corticosterone D. Cortisol

Q.836 On top of each kidney, there is present a/an:

A. Adrenal gland B. Thyroid gland
C. Parathyroid gland D. Prostate gland

Q.837 Find the right statement about neuron.

A. Nucleus is located in synaptic knob.
B. Axon is known as receiving end of impulse.
C. Nucleus is located in cell body.
D. None of these

Q.838 All of the following are the parts of fore-brain except:

A. Hypothalamus B. Cerebellum
C. Thalamus D. None, as A.O.T. are parts of fore-brain

Q.839 The neuron repolarizes at:

A. -55Mv B. 0mV
C. -65mV D. +40mV
E. +65mV

Q.840 A stimulus causes:

A. Sudden influx of K+ ions B. Sudden influx of Na+ ions
C. Sudden influx of Ca+ ions D. B and C
E. Sudden efflux of Na+ ions

Q.841 What happens when depolarization reaches at +40mV?

I) Potassium ion channels close and sodium ion channels open
II) Sodium ion channels close and potassium ion channels open
III) Sodium ion channels and potassium ion channels open

A. I only B. II only
C. III only D. Either II or III
E. I, II and III

Q.842 Which one of the following components of brain is involved in our experience of emotions?

A. Amygdala B. Hippocampus
C. Thalamus D. Reticular formation

Q.843 The brainstem includes the components of:

A. Fore-brain and hind-brain B. Mid-brain and fore-brain
C. Mid-brain and hind brain D. Fore-brain, mid-brain and hind-brain
E. None of these

Q.844 In certain axons, the glial cells form a fatty substance called as:

A. Neurolemma B. Myelin sheath
C. Node of Ranvier D. Sodium-potassium pump

Q.845 What is true about resting membrane?

I) Concentration of K^+ inside axon membrane is high (relative to outside)
II) Concentration of Na^+ outside axon membrane is high (relative to inside)
III) Concentration of K^+ and Na^+ in neuron is relative equal (on both sides)

A. I only B. II only
C. III only D. I and II
E. I, II and III

Q.846 Communication between two neurons:

A. Occurs at Node of Ranvier B. Occurs at Schwann cell
C. Occurs at synaptic cleft D. Occurs at axon-hillock
E. None of these

Q.847 If the stimulus opens K^+ channels, K^+ move out causing the membrane potential to become even more negative; it results in:

A. Depolarization B. Hyperpolarization
C. Synaptic delay D. Isopolarization

Q.848 What happens when a stimulus reaches a threshold?

A. Permanent reversal of the charges on either side of the axon membrane
B. The charges on either side of the axon membrane become equal
C. Temporary reversal of the charges on either side of the axon membrane
D. None of these

Q.849 Which one of the following protects brain and spinal cord from bumps and jolts?

A. Meninges B. CSF
C. Cranium D. All of these

Q.850 The outermost part of the brain is known as:
A. Motor cortex B. Cerebral cortex
C. Sensory cortex D. White matter
E. Ventricle

Q.851 Water and food intake are regulated by:
A. Cerebrum B. Thalamus
C. Cerebellum D. Hypothalamus
E. None of these

Q.852 Pre-synaptic neuron refers to the:
A. Neuron that inhibits generation of action potential
B. Neuron that breaks neurotransmitter
C. Neuron that releases the neurotransmitter
D. Hypothalamus
E. None of these

Q.853 Parietal lobe is located immediately behind _____G______, and is involved in processing information from the body's senses as it contains ______H_______.

	G	H
A.	Frontal lobe	Motor cortex
B.	Temporal lobe	Motor cortex
C.	Frontal lobe	Somatosensory cortex
D.	Occipital lobe	Somatosensory cortex

Q.854 Neurons are separated by:
A. Synaptic cavity B. Synaptic sac
C. Synaptic cleft D. Synaptic vesicle

Q.855 Stimulus causes the membrane at one part of the neuron:
A. To increase in permeability to K B. To increase in permeability to Na
C. To increase in permeability to Ca D. To increase in permeability to both Na and K

Q.856 Which one of the following is generally known as 'thermostat' of body?
A. Cerebrum B. Thalamus
C. Cerebellum D. Hypothalamus
E. None of these

Q.857 Which one of the following directly covers spinal cord?
A. Dura mater B. Vertebra
C. Arachnoid mater D. Pia mater
E. CSF

Q.858 'Lock-and-key' relationship is observed between:
A. Node of Ranvier and Schwann's cell
B. Vesicle and axon terminal
C. Receptor and neurotransmitters
D. Axon and dendrite
E. None of these

Q.859 What happens when active transport using sodium-potassium pump?
(I) $3Na^+$ actively pumped out of the membrane and $2K^+$ are actively transported into the axon.
(II) $2K^+$ actively pumped out of the membrane and $3Na^+$ are actively transported into the axon.
(III) $2Na^+$ actively pumped out of the membrane and $1K^+$ are actively transported into the axon.
A. I only B. II only
C. III only D. Either II or III
E. I, II and III

Q.860 Neurotransmitter fuses with receptors on:
A. Pre-synaptic neuron B. Dendrite
C. Post-synaptic neuron D. Axon-hillock

Q.861 The auditory cortex is mainly responsible for processing auditory information and is situated within ______________.
A. Occipital lobe B. Temporal lobe
C. Parietal lobe D. Frontal lobe

Q.862 Which sense(s) is/are routed through the thalamus before being directed to other areas of the brain for processing?
I) Sense of vision II) Sense of smell III) Sense of touch
A. I only B. II only
C. III only D. I and III
E. I, II and III

Q.863 The term for enlarged section of an axon is:
A. Synaptic knob B. Synaptic cleft
C. Synaptic vesicle D. Synaptic delay

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Q.864 The neurotransmitter that affects mood is:

A. Epinephrine B. Acetylcholine
C. Glycine D. Serotonin

Q.865 Upon release of neurotransmitters into synaptic cleft, they bind to:

A. Receptors on Node of Ranvier of an adjacent neuron
B. Receptors on axon terminal of an adjacent neuron
C. Receptors on synaptic vesicle of an adjacent neuron
D. Receptors on dendrite of an adjacent neuron
E. None of these

Q.866 The localized electrical circuits established by the influx of Na^+ causes:

A. Potassium voltage-gated channels to open
B. Sodium voltage-gated channels to close
C. Sodium voltage-gated channels to open
D. Potassium voltage-gated channels to close

Q.867 Each cortical hemisphere includes regions known as:

A. Ventricles B. Lobes
C. Central canal D. Meninges

Q.868 Hypothalamus regulates ____P______ by sending signals to ____Q_____.

	P	Q
A.	Nervous system	Spinal cord
B.	Endocrine system	Thalamus
C.	Endocrine system	Cerebellum
D.	Endocrine system	Pituitary gland

Q.869 Influx of Ca^{2+} into presynaptic neuron results in:

A. Synaptic vesicles to fuse with the post-synaptic membrane
B. Reabsorption of neurotransmitter
C. Synaptic vesicles to fuse with the pre-synaptic membrane
D. Either A or C

Q.870 Automatic processes of ANS are regulated by:

A. Cerebrum B. Cerebellum
C. Medulla oblongata D. All of these

Q.871 What happens when the Na^+ entry in cell declines?

A. Leak K^+ channels open
B. Voltage gated Na^+ channels open
C. Sodium-potassium pump becomes operational
D. Voltage gated K^+ channels open

Q.872 Where neurotransmitters are stored?

A. Synaptic knob B. Synaptic cleft
C. Synaptic vesicles D. Synaptic delay

Q.873 The gap between adjacent Schwann cells is known as:

A. Synaptic cleft B. Axon hillock
C. Node of Ranvier D. Synaptic vesicle

Q.874 The resting potential is generated by:

I) Ion pumps II) Ion channels III) Receptors

A. I only B. II only
C. I and II D. I, II and III

Q.875 ______ is called an excitatory postsynaptic potential (EPSP).

A. Hyperpolarization in a postsynaptic potential
B. Depolarization in a postsynaptic potential
C. Repolarization in a postsynaptic potential
D. None of these

Q.876 The emotions, such as aggression and fear are regulated by:

A. Hippocampus B. Amygdala
C. Pons D. Thalamus

Q.877 Action potential arrives at pre-synaptic neuron:

A. Causing K^+ channels to open B. Causing Ca^{2+} channels to open
C. Causing Na^+ channels to open D. None of these

Q.878 Indicate the neurotransmitter that causes decreased membrane permeability to sodium ions.

A. Dopamine B. GABA
C. Serotonin D. None of these

Q.879 The negative charge within the cell is created by the cell membrane:

A. Being more permeable to sodium ion movement than potassium ion movement.
B. Being more permeable to potassium ion movement than sodium ion movement
C. Being more permeable to calcium ion movement than potassium ion movement.
D. None of these

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Q.880 Behind the region of depolarization:
A. Sodium and potassium leak channels open
B. Sodium voltage gated channels close and the potassium ones open
C. Potassium voltage gated channels close and the sodium ones open
D. None of these

Q.881 Once the neurotransmitter is released from the vesicle:
I) It diffuses across post-synaptic cleft
II) It breaks and reabsorbed at post-synaptic membrane
III) It diffuses across post-synaptic membrane
A. I only
B. II only
C. III only
D. II and III
E. I, II and III

Q.882 If stimulus fails to arise any response, it is known as:
A. Action potential
B. Resting membrane potential
C. Threshold stimulus
D. Sub-threshold stimulus

Q.883 What happens when extracellular sodium moves to intracellular region?
A. Polarization
B. Repolarization
C. Depolarization
D. Hyperpolarization
E. Nothing happens

Q.884 The axon of other neurons:
A. Form synapse with cyton
B. Form synapse with axon hillock
C. Form synapse with dendrites
D. Form synapse with vesicles

Q.885 Nissl's granules consist of:
A. Mitochondria + ribosomes
B. RER + SER
C. SER + nucleolus
D. RER + Ribosomes
E. Ribosomes + SER + RER

Q.886 During reflex action, the path of nerve impulse is known as:
A. Reflex centre
B. Autonomic pathway
C. Synaptic deft
D. Reflex arc

Q.887 Active membrane potential is characterized by:
A. More negative inside of neuron than outside
B. More positive inside of neuron than outside
C. Sodium gates start to close again
D. Potassium ions continue to enter the axon
E. Refractory period of few millisecond

Q.888 In sensory neurons, the branches at one end are:
A. Connected to effector
B. Connected to axon terminal of motor neuron
C. Connected to receptor
D. None of these

Q.889 Thalamus carries sensory information to:
A. Cerebrum
B. Limbic system
C. Cerebrum and limbic system
D. Cerebrum and cerebellum

Q.890 Right cerebral hemisphere:
A. Controls right side of body.
B. Controls left side of body.
C. Both A and B
D None of these

Q.891 The processing of both memory and emotions is related to:
A. Medulla oblongata
B. Thalamus
C. Limbic system
D. None of these

Q.892 Synaptic vesicles move towards membrane of pre-synaptic cell due to:
A. Higher concentration of Na$^+$
B. Higher concentration of Cl$^-$
C. Higher concentration of Ca$^+$
D. Lower concentration of Ca$^+$

Q.893 Which component of human brain is related to judgment?
A. Cerebellum
B. Hippocampus
C. Hypothalamus
D. None of these

Q.894 Adrenaline is hydrolyzed by:
A. Adrenalinase
B. Acetylcholinesterase
C. MAO
D. None of these

Q.895 Normal speed of nerve impulse in human is:
A. 5 m/sec
B. 10 m/sec
C. 100 m/sec
D. 1000 m/sec

Q.896 The action potential _____W______ from one neuron to the next in line; rather the message is transmitted across ______X______ in the form of _______Y________.

	W	X	Y
A.	Cannot jump	Node of Ranvier	Electrical form
B.	Cannot jump	Synapse	Neurotransmitter
C.	Can jump	Node of Ranvier	Electrical form
D.	Can jump	Synapse	Neurotransmitter

Q.897 Limbic system is located:
A. Between mid-brain and hind brainB. Between fore brain and mid brain
C. Between cerebellum and cerebrum D. Between thalamus and cerebrum

Q.898 Identify the component of brain involved in following regulating functions.
I) Sensation of Punishment
II) Sexual arousal when stimulated
III) Sensation of pleasure
A. Mid brain B. Hippocampus
C. Pons D. Amygdala

Q.899 Acetylcholine is a:
A. Excitatory neurotransmitter of CNS B. Excitatory neurotransmitter of PNS
C. Inhibitory neurotransmitter of PNS D. None of these

Q.900 Identify the component of brain with following controlling functions.
I) Balance II) Helps in coordinating movement
A. Cerebellum B. Hypothalamus
C. Cerebrum D. Pons

Q.901 Which one of the following is important in regulating alertness?
A. Medulla oblongata B. Reticular formation
C. Hippocampus D. Thalamus

Q.902 Hypothalamus acts as main coordinating centre controlling water balance and sleep-wake cycle etc. through:
A. Neural connections B. Hormone production
C. Both A and B D. None of these

Q.903 Cerebral cortex forms folds called:
A. Lobes B. Sulci
C. Convolutions D. Corpus callosum

Q.904 Find the right statement.
A. Hind brain is very much reduced in humans.
B. Midbrain is well developed in humans.
C. Cerebellum is well developed in birds.
D. None of these is right statement.

Q.905 Which of the following hormone stimulates the gonads?
A. GnRH B. Gonadotrophin
C. Both D. None

Q.906 The hormone released by posterior pituitary that stimulates the contraction of uterine and mammary gland muscles is called:
A. Prolactin B. LH
C. FSH D. Oxytocin

Q.907 Which of the following condition is resulted from excess of GH in adults?
A. Cushing's disease B. Acromegaly
C. Hyperthyroidism D. Diabetes mellitus

Q.908 ____________ regulates the kidney's retention of water?
A. Prolactin B. Oxytocin
C. Thyroxin D. Vasopressin (ADH)

Q.909 Adrenal medulla is stimulated by:
A. ACTH B. CRH
C. ACTRF D. None

Q.910 Deficiency of which of the following causes diuresis?
A. LH B. ACTH
C. FSH D. ADH

Q.911 Weight of pituitary gland is.
A. 5 mg B. 5 gm
C. 0.5 mg D. 0.59m

Q.912 Hyperfunctioning of thyroid
A. Enlargement of bones B. Slow heartrate and nervousness
C. Loss of body weight D. Sexual precocity

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Q.913 Normally 100 ml blood contain ____________ Glucose?
A. 100 mg
B. 100gm
C. 15 mg
D. 15 gm

Q.914 Insulin is produced by:
A. Alpha-cells
B. Beta-cells
C. Delta-cells
D. Gamma-cells

Q.915 Which of the following hormone is secreted from hypothalamus?
A. ADH
B. Oxytocin
C. TRF
D. All

Q.916 Aestivation is also known as:
A. Spring sleep
B. Winter sleep
C. Autumn sleep
D. Summer sleep

Q.917 Cortisone is an important hormone of:
A. Adrenal cortex
B. Adrenal medulla
C. Cerebral cortex
D. Cerebral medulla

Q.918 Inhibin is secreted from:
A. Cells of prostate
B. Cells of seminal vesical
C. Cells of seminiferous tubules
D. leydig cells

Q.919 Increased secretion of antidiuretic hormone is due to:
A. Decreased water supply
B. Kidney disorder
C. Homeostasis
D. Increase water supply

Q.920 Bones may become weak due to:
A. Deficiency of parathormone
B. Sufficiency of calcitonin
C. Both
D. None

Q.921 The target organ for vasopressin is:
A. Heart
B. Liver
C. Stomach
D. Kidneys

Q.922 The secretion of glucagon is inhibited by:
A. Low insulin level
B. Somatostatin
C. Both
D. None

Q.923 Thirst is controlled by:
A. Pituitary gland
B. Adrenal gland
C. Parathyroid
D. Thyroid gland

Q.924 Pancreatic juice contains ________ hormone?
A. Secretin
B. Somatostatin
C. Serotonin
D. None

Q.925 The rate of metabolism is regulated by:
A. PTH
B. Thyroxin
C. Aldosterone
D. Calcitonin

Q.926 First crystalline hormone is:
A. Thyroxin
B. Nor adrenalin
C. Adrenalin
D. All

Q.927 Testosteron secretion is stimulated by:
A. GnRH
B. Gonadotrophin
C. Both
D. None

Q.928 Gonadotropin releasing hormone is responsible for the stimulation/release of which hormone?
A. LH
B. Proesteron
C. Secretin
D. Insulin

Q.929 Which of the following hormone prepare the body for stress and emergency situation?
A. Adrenaline
B. Nor adrenaline
C. Thyroxin
D. Insulin

Q.930 Goiter is caused by the deficiency of:
A. Sodium in water
B. Calcium in water
C. Iodine in water
D. Sugar in water

Q.931 Tyrptrophin is secreted from:
A. Anterior pituitary
B. Posterior pituitary
C. Hypothalamus
D. Thyroid gland

Q.932 Exophthalmia is a classic symptom of:
A. Hyperthyroidism
B. Hypocalcemia
C. Hypochondria
D. Hyperglycemia

Q.933 _________occur due to the deficiency of insulin?
A. Hypoglycemia
B. Glycosuria
C. Both
D. None

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Q.934 Which of the following is none steroidal hormone?

A. Cortisol
B. Testosterone
C. Insulin
D. Aldosterone

Q.935 Which of the following increases the K^+ level in the blood?

A. ADH
B. Aldosterone
C. Both
D. None

Q.936 Conversion of excess glucose into fat is known as:

A. Glycolysis
B. Lipogenesis
C. Ketogenesis
D. Glycogenesis

Q.937 Aldosterone helps in the reabsorption of:

A. Na+
B. Water
C. Both
D. None

Q.938 ADH receptors are located in:

A. Distal convoluted tubule
B. Collecting duct
C. Both
D. None

Q.939 Parathyroid hormone acts to ensure that:

A. Calcium levels in the blood never drop too low
B. Sodium levels in urine are constant
C. Potassium levels in the blood do not escalate
D. The concentration of water in the blood is sufficient

Q.940 The adrenal cortex produces

A. Adrenalin
B. Calcitonin
C. Epinephrine
D. Aldosterone

Q.941 A condition of excessive thirst due to diabetes is called:

A. Polyuria
B. Glycosuria
C. Polyphagia
D. Polydipsia

Q.942 Oxytocin contain Peptide bonds.

A. 8
B. 9
C. 49
D. None

Q.943 Which of the following hormones play role in biorhythms?

A. MSH
B. LH
C. ADH
D. Melatonin

Q.944 Oxytocin is synthesized in:

A. Anterior pituitary
B. Posterior pituitary
C. Middle lobe
D. None

Q.945 The deficiency of calcitonin results in:

A. Bone formation
B. Kidney stone
C. Hyperthyroidism
D.Hypothyroidism

Q.946 Which one of the following animals is viviparous?

A. Rat
B. Crocodile
C. Duckbilled platypus
D. Spiny ant eater

Q.947 Deficiency of somatotrophin in adult causes:

A. Dwarfism
B. Acromegaly
C. Gigantism
D. None

Q.948 Which of the following hormone may block the menstrual cycle in lactating women?

A. Somatomammotrophin
B. Lactogen
C. GnRH
D. Gonadotrophin

Q.949 ln humans, MSH (melanocyte- stimulating hormone)

A. Regulates primary Skin color
B. Causes the thyroid to produce thyroxin
C. Governs the rate of tanning
D. Concentration is very low

Q.950 Deficiency of vasopressin or ADH by the pituitary gland leads to a disorder in which the patient's kidneys have lessened ability to absorb water is

A. Diabetes mellitus
B. Diabetes insipidus
C. Goiter
D. Exophthalmic goiter

Q.951 The function/s of oxytocin is/are to

A. Cause the uterus to contract
B. Induce labor
C. Stimulate the release of milk
D. All of the above

Q.952 ACTH stimulates the:

A. Kidney
B. Adrenal gland
C. Both
D. None

Q.953 Which of the following is autoimmune diseases?

A. Graves disease
B. Osteo arthritis
C. Dibitus mellitus type-II
D. All

Q.954 Which of the following promote gluconeogenesis?
A. Insulin B. Glucogon
C. Somatostatin D. TSH

Q.955 Which of the following hormones is not released by anterior pituitary?
A. Melanocyte-stimulating hormone B. Gonadotropin
C. Thyroid-stimulating hormone D. Growth hormone

Q.956 Oxytocin secreted by the endocrine gland named
A. Pituitary gland B. Thyroid gland
C. Parathyroid gland D. Adrenal gland

Q.957 Melatonin is secreted from:
A. Hypothalamus B. Melanocyte
C. Skin D. None

Q.958 Which one is not ductless gland?
A. Lacrimal gland B. Seminal vesicle
C. Prostate gland D. All

Q.959 Secretion of adrenaline is regulated by
A. CRH B. Corticotrophin
C. ACTRF D. ACTH
E. All F. None

Q.960 Tyrotrophin regulate the secretion of
A. TRE B. TSH
C. Both D. None

Q.961 Mental retardation occurs in ________?
A. Myxedema B. Graves's disease
C. Cretinism D. All

Q.962 Vasopressin synthesis occurs in________?
A. Anterior pituitary B. Hypothalamus
C. Posterior pituitary D. Kidney

Q.963 Hormone which controls the rate of spermatogenesis is secreted from?
A. Posterior pituitary B. Sertoli cells
C. Lydig cells D. Interstitial cells

Q.964 Steroid hormones are secreted by
A. The adrenal cortex B. The gonads
C. The thyroid D. Both A and B

Q.965 Examples of posterior pituitary hormones are
A. FSH and LH B. Prolactin and parathormone
C. Melatonin and prostaglandin D. ADH and oxytocin

Q.966 The primary targets for FSH are cells in the
A. Hypothalamus B. Ovary
C. Thyroid D. Pituitary

Q.967 Which of the following controls the activity of all others?
A. Thyroid B. Pituitary
C. Adrenal cortex D. Gonads

Q.968 Which of the following have antagonistic (opposing) affects?
A. Parathyroid hormone and calcitonin
B. Glucagons and thyroxin
C. Growth hormone and epinephrine
D. Cortisone and ACTH

Q.969 Which of the following hormones has broadest range of targets?
A. ADH B. Oxytocin
C. TSH D. Epinephrine

Q.970 The pancreas increases its output of insulin in response to
A. An increase in body temperature B. Changing cycle of dark and light
C. A decrease in blood glucose D. And increase in blood glucose

COORDINATION AND CONTROL/NERVOUS & CHEMICAL COORDINATION
MCQ's FROM PMC PRACTICE PAPERS

Nervous system

Q.971 Which part of the nervous system controls actions like walking and running?
A. Somatic nervous system B. Parasympathetic nervous system
C. Sympathetic nervous system D. Peripheral nervous system

Q.972 Which of the following does not form part of the central nervous system?
A. Brain B. Spinal cord
C. Brain stem D. Spinal nerves

Q.973 Central nervous system consists of:
A. Brain and spinal cord B. Cerebrum and spinal column
C. Spinal nerves only D. Cerebellum and brain stem only

Q.974 Nervous system is absent in:
A. Sycon
B. Euplectella
C. Jelly fish
D. Both a and b

Q.975 Brachial plexus supply to:
A. Heart
B. Upper limbs
C. Lower limbs
D. Abdomen

Q.976 The response of the sympathetic nervous system is known as:
A. Autonomic response
B. Flight response
C. Somatic response
D. Reflex response

Q.977 Parasympathetic system causes:
A. Digestion of food
B. Accelerated heart beat
C. High metabolism
D. Rapid muscle movement

Q.978 One of the actions of the parasympathetic nervous system is?
A. Inhibits peristalsis
B. Sweat secretion
C. Constriction of Pupils
D. Dilates Bronchioles

Q.979 The autonomic nervous system functions?
A. Act on external environment
B. Regulate the internal environment
C. Transmit motor information to brain
D. None of these

Q.980 The abundant inhibitory neurotransmitter found in the CNS is called?
A. Gamma-glutamyltransferase
B. Gamma-linolenic acid
C. Gamma-Aminobutyric acid
C. None of these

Transmission of action potential between cells–synapse

Q.981 The main transmitter for synapses that lie outside the central nervous system is?
A. Adrenaline
B. Serotonin
C. Dopamine
D. Acetylcholine

Hormones

Q.982 What is the chemical nature of antidiuretic hormone?
A. It is a protein
B. It is an amino acid derivative
C. It is made from cholesterol
D. It is a lipoprotein

Q.983 When vasopressin is not secreted, the condition that occurs is called?
A. Acromegaly
B. Diabetes mellitus
C. Dwarfism
D. Diabetes insipidus

Q.984 Cortisol brings about an increase in blood glucose level mainly by its production from protein and _________.
A. Glucagon
B. Insulin
C. Estrogen
D. Progesterone

Q.985 Which disease is represented by excess MSH secretion?
A. Addison's
B. Alzheimer's
C. Parkinson's
D. Cohn's

Q.986 Primary hormone is:
A. STH
B. FSH
C. LH
D. Prolactin

Q.987 Which of the following is not a gonadotrophic hormone?
A. Estrogen
B. LH
C. FSH
D. Prolactin

Q.988 In females testosterone is produced from:
A. Graffian follicle
B. Adrenal cortex
C. Adrenal medulla
D. None

Q.989 Vascularization in endometrium in induced by:
A. LH
B. Estrogen
C. FSH
D. ICSH

Q.990 Which of the following is taken from blood by the liver due to insulin?
A. Glucagon
B. Glucose
C. Glucocorticoid
D. All of these

Q.991 Deficiency in the production of parathormone causes which of the following disease?
A. Brittle bones
B. Soft bones
C. Rickets
D. Tetany

Q.992 Tetany is considered to be the result of a
A. Hyperglycemia
B. Hypercalcemia
C. Hypoglycemia
D. Hypocalcaemia

Q.993 Thyroid stimulating hormone is produced by:
A. Anterior lobe of thyroid
B. Exterior lobe of pituitary gland
C. Posterior lobe of pituitary gland
D. Anterior lobe of pituitary gland

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Q.994 In humans placenta is established by:
A. Hypothalamus B. Progesterone
C. Thalamus D. Estrogen

Q.995 Deficiency of cortical hormones causes:
A. Cushing syndrome B. Addison's disease
C. Dwarfism D. Cretinism

Q.996 Goiter develops in which case?
A. Hyperthyroidism B. Hypothyroidism
C. Both A & B D. None of the above

Q.997 Thyroid hormone increases metabolic rate by:
A. Breakdown of nucleic acids B. Breakdown of vitamins
C. Breakdown of proteins D. Breakdown of carbohydrates

Q.998 Insufficient thyroxine in adults leads to:
A. Dwarfism B. Myxedema
C. Cretinism D. Grave's disease

Q.999 Which of the following is the effect of STH?
A. Growth of body B. Body metabolism
C. Glucose breakdown D. Heat production

Q.1000 Decreased production of parathyroid leads to:
A. Increase in calcium levels B. Increase in vitamin B12
C. Decrease in calcium levels D. Decrease in vitamin B12

Q.1001 It is not secreted by placenta:
A. Progesterone B. Estrogen
C. Human placental lactogen D. LH

Q.1002 FSH is released from:
A. Pituitary gland B. Hypothalamus
C. Brain D. Blood

Endocrine glands

Q.1003 The pea-shaped gland attached to the brain's hypothalamus is known as:
A. Iodopsin glands B. Thyroid gland
C. Rhodopsin glands D. Pituitary glands

Q.1004 Thymus is found in human body _____.
A. In the medulla oblongata B. In the mediastinum if the upper thorax
C. Both A & B D. None

Q.1005 Largest endocrine gland is__________.
A. Pancreas B. Pituitary
C. Thyroid D. Thymus

Reflexes and reflex arc

Q.1006 Which of these does not participate in reflex actions?
A. Motor neuron B. Effector
C. Pituitary D. Spinal cord

Q.1007 Most reflex arcs are:
A. Monosynaptic reflex B. Polysynaptic reflex
C. Hemi Synaptic Reflex D. None of these

Q.1008 The patellar reflex and the Achilles reflex are examples of:
A. Monosynaptic reflex B. Blood and water
C. Hemi Synaptic reflex D. Blood and fluid

Q.1009 The term that should be last in the reflex sequence is:
A. Receptor B. Effector
C. Sensory neuron D. Motor neuron

Q.1010 Reflex action is controlled by:
A. Peripheral nervous system B. Central nervous system
C. Autonomic nervous system D. Circulatory system

Q.1011 The path taken by the nerve impulses in a reflex is called:
A. Nerve cell B. Reflex arc
C. Receptor cells D. Mixed nerve

Q.1012 Reflex action is the simplest form of response in:
A. Higher Animals B. Smaller animals
C. Simpler animals D. Lowest animals

Q.1013 Which part of the nervous system is responsible for controlling reflex action?
A. Corpus callosum B. Pons
C. Vermis D. Spinal cord

Q.1014 Monosynaptic refers to the presence of how many chemical synapse/s?
A. 1 B. 2
C. 3 D. 4

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Q.1015 All of the following about reflex action are true except:

A. It is voluntary
B. It is found in higher animals
C. It is involuntary
D. All of these

Q.1016 Which of the following is an example of superficial reflex?

A. Ankle jerk
B. Knee jerk
C. Abdominal reflex
D. Both A & B

Q.1017 Reflex arc comprises of:

A. Motor nerve
B. Sensory nerve
C. Both A and B
D. Mixed nerve

Q.1018 Which type of reflex affect inner organs?

A. Autonomic reflex arc
B. Somatic reflex arc
C. Both A and B
D. None of these

Q.1019 A neural pathway that controls an action reflex is called:

A. Nerve cell
B. Reflex arc
C. Receptor cells
D. Mixed nerve

Q.1020 Which of the following is made up of an afferent pathway from a receptor and an efferent pathway to an effector?

A. Nerve cell
B. Reflex arc
C. Receptor cells
D. Mixed nerve

Q.1021 An involuntary and nearly instantaneous movement in response to a stimulus is called:

A. Reflex
B. Reflex arc
C. Neuron
D. Synapse

Q.1022 The shortest way by which impulses travel from the receptor to the effector is called?

A. Synapse
B. Reflex actin
C. Reflex arc
D. Voluntary response

Q.1023 The stretch reflex, the Golgi tendon reflex, the crossed extensor reflex and the withdrawal reflex are included in:

A. Stretch reflex
B. Spinal reflex
C. Golgi tendon reflex
D. Crossed extensor reflex

Levels of the spinal cord and its main functions

Q.1024 Gray matter is primarily composed of:

A. Axons
B. Synapse
C. Neuron somas
D. None of these

Q.1025 The spinal cord is part of:

A. Brain
B. Central nervous system
C. Peripheral nervous system
D. Somatic division

Q.1026 What is the length of spinal cord?

A. 10-20 cm
B. 20-30 cm
C. 40-50 cm
D. 60-90 cm

Q.1027 The spinal cord and spinal nerve roots are wrapped within three layers called:

A. Pleura
B. Meninges
C. Synapse
D. None of these

Q.1028 The spinal cord acts as a link between body parts and_______.

A. Brain
B. Skull
C. Heart
D. Lungs

Q.1029 The material in brain and spinal cord contains cell bodies and dendrite of nerve cells is:

A. White matter
B. Blue matter
C. Brown matter
D. Gray matter

Q.1030 Choose the region of spinal cord:

A. Cervical
B. Thoracic
C. Lumbar
D. All of these

Q.1031 The spinal cord is continuous with which part of the brain?

A. Cerebrum
B. Medulla oblongata
C. Cerebellum
D. Pons

Q.1032 In the peripheral nervous system, the nerves that arise from spinal cord and brain are called?

A. Frontal nerves
B. Temporal nerves
C. Cranial nerves
D. Spinal nerves

Q.1033 Out of 31 pairs of spinal nerves, how many pairs of coccygeal nerves are there?

A. 1
B. 5
C. 10
D. 12

Q.1034 The ventral root of the spinal cord contains axons of:

A. Sensory neuron
B. Motor neuron
C. Mixed neuron
D. Spinal neuron

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Q.1035 Out of 31 pairs of spinal nerves, how many pairs of lumbar nerves are there?
A. 5 B. 10
C. 15 D. 20

Q.1036 The medulla oblongata is found on which of the following regions?
A. Top of brain B. Top of spinal cord
C. Behind the hypothalamus D. Behind the thalamus

Q.1037 Out of 31 pairs of spinal nerves, how many pairs of sacral nerves are there?
A. 5 B. 10
C. 12 D. 15

Q.1038 The dorsal root of spinal cord is:
A. Sensory B. Motor
C. Mixed D. All A, B and C are correct

Q.1039 White matter has:
A. Myelinated sheath B. Non-myelinated sheath
C. Myelinated neuron D. Non-myelinated neuron

Q.1040 The shape of grey matter is:
A. Spherical B. Mosquito
C. Butterfly D. Rectangular

Q.1041 The spinal cord is divided into how many different regions?
A. 2 B. 6
C. 4 D. 8

Q.1042 How many laminae present in the spinal cords grey matter?
A. 10 B. 8
C. 12 D. 9

Q.1043 White matter is primarily composed of:
A. Axons B. Synapse
C. Neuron somas D. None of these

Q.1044 Out of 31 pairs of spinal nerves, how many pairs of thoracic nerves are there?
A. 8 B. 10
C. 12 D. 15

Q.1045 Number of pairs of spinal nerves are:
A. 31 B. 12
C. 13 D. None

Q.1046 What is the most important structure between body and brain?
A. Neck B. Spinal cord
C. Blood vessels D. Skeleton

Parts of the brain with their main functions

Q.1047 Regulation of _________ is not a function of hypothalamus in humans.
A. Body temperature B. Blood water potential
C. Urine osmolarity D. Circadian rhythms & emotions

Q.1048 The part of forebrain which lies below the cerebrum is?
A. Hypothalamus B. Thalamus
C. Cerebellum D. Cerebral cortex

Q.1049 Which portion of the brain is primarily responsible for transmitting the information to other parts of the nervous system?
A. White matter B. Gray matter
C. Medulla D. All A, B and C

Q.1050 The largest part of forebrain which controls the intelligence, emotions and skeletal muscles is classified as?
A. Hypothalamus B. Thalamus
C. Cerebellum D. Cerebrum

Q.1051 Sensory areas that receive impulses from the skin are contained by which of the following?
A. Frontal lobe B. Parietal lobe
C. Occipital lobe D. Temporal lobe

Q.1052 Breathing and heart rate is controlled by which of these?
A. Corpus callosum B. Hippocampus
C. Medulla D. Thalamus

Q.1053 Which of the following is required for learning?
A. Medulla B. Thalamus
C. Hypothalamus D. Hippocampus

Q.1054 Which of the followings is related to hypothalamus?
A. Sleep-wake cycle B. Water balance
C. Thermoregulation D. All of these

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Q.1055 Midbrain is also known as:
A. Pons
B. Mesencephalon
C. Medulla
D. All of these

Q.1056 It is not correct about cerebrospinal fluid:
A. Present between meninges
B. Provides protection
C. Fills central canal of spinal cord
D. pH is below 7

Q.1057 Brain part that coordinates skeletal muscles:
A. Cerebrum
B. Cerebellum
C. Amygdala
D. Medulla

Q.1058 It acts as a relay center connecting hindbrain with the forebrain:
A. Forebrain
B. Midbrain
C. Hindbrain
D. Limbic system

Q.1059 Which of the following is not the function of medulla oblongata?
A. Breathing
B. Swallowing
C. Connection between brain and spinal cord
D. Heart beat

Q.1060 Which is involved in long term memory?
A. Cerebrum
B. Hypothalamus
C. Hippocampus
D. Thalamus

Q.1061 Which of these is involved in coordinated movements of the body?
A. Cerebellum
B. Cerebrum
C. Medulla
D. Pons

Q.1062 The diencephalon comprises of:
A. Pons and medulla
B. Thalamus and limbic system
C. Pons and medulla
D. Hypothalamus and limb

Q.1063 The brain is protected by:
A. Sacrum
B. Cranium
C. Humerus
D. Scapula

Q.1064 The cerebrospinal fluid is similar in composition to ________.
A. Amniotic fluid
B. Pleural fluid
C. Synovial fluid
D. Blood plasma

Q.1065 Which fluid bathes the neurons of brain and spinal cord and provides cushions against the bumps and jolts?
A. Blood
B. Interstitial fluid
C. Intracellular fluid
D. Cerebrospinal fluid

Q.1066 The brain is mainly divided into________ parts.
A. 2
B. 3
C. 4
D. 5

Q.1067 The embryonic hindbrain gives rise to which structures in brain?
A. Diencephalon
B. Midbrain
C. Cerebrum and basal ganglia
D. Cerebellum, pons and medulla oblongata

Q.1068 The communication between the two hemispheres is the function of:
A. Corpus callosum
B. Hindbrain
C. Cerebellum
D. Cerebrum

Q.1069 The composition of brain stem is:
A. Spinal cord, axon, vertebra
B. Cerebrum, cerebellum, pons
C. Medulla, pons, midbrain
D. Thalamus, midbrain, pons

Q.1070 Which lobe is involved in short-term memory, speech, musical rhythm and some degree of smell recognition?
A. Frontal
B. Parietal
C. Temporal
D. Occipital

Q.1071 Which of the following is involved in sleeping and waking?
A. Thalamus
B. Brain stem
C. Hypothalamus
D. Cerebellum

Q.1072 Which part of the brain connects the cerebrum with the spinal cord?
A. Forebrain
B. Cerebrum
C. Cerebellum
D. Brainstem

Q.1073 The functional parts of forebrain are:
A. Thalamus and limbic system
B. Thalamus and cerebrum
C. Cerebrum, limbic system and thalamus
D. Cerebrum and limbic system

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Q.1074 The brain portion that is reduced in humans is:
A. Forebrain
B. Midbrain
C. Hindbrain
D. Limbic system

Q.1075 The auditory relay center is found in:
A. Corpus callosum
B. Hindbrain
C. Forebrain
D. Midbrain

Q.1076 Hindbrain includes:
A. Medulla, pons and cerebellum.
B. Medulla, cerebellum and hypothalamus.
C. Cerebellum, medulla and brainstem.
D. All of the above.

Q.1077 Which part increase the surface area of forebrain?
A. Cerebral cortex
B. Infundibulum
C. Corpus callosum
D. None of the above

Q.1078 Which brain part is responsible for our basic and primitive emotions?
A. Limbic system
B. Thalamus
C. Hypothalamus
D. Cerebrum

Q.1079 The thalamus and the hypothalamus are located in which region of the brain?
A. Brain stem
B. Cerebrum
C. Cerebellum
D. Diencephalon

Q.1080 The left side of the body is controlled by:
A. Left cerebral hemisphere
B. Right cerebral hemisphere
C. Hippocampus
D. Corpus callosum

Q.1081 The lighter, inner section of the brain is called:
A. White matter
B. Gray matter
C. Reflex arc
D. Medulla

Q.1082 The brain area responsible for screening all incoming sensory data is:
A. Hypothalamus
B. Thalamus
C. Cerebellum
D. Cerebral cortex

Q.1083 The brain part involved in conscious activities is:
A. Cerebral cortex
B. Limbic system
C. Brain stem
D. Thalamus

Q.1084 Medulla, pons and cerebellum are found in which brain part?
A. Corpus callosum
B. Midbrain
C. Forebrain
D. Hindbrain

Q.1085 The darker, outer portion of the brain is called:
A. White matter
B. Gray matter
C. Reflex arc
D. Medulla

Q.1086 Central nervous system is present in:
A. Asymmetrical animals
B. Bilaterally symmetrical animals
C. Radial symmetrical animals
D. Both B and C

Nerve impulse

Q.1087 Terminal branches of axons end in:
A. Myelin sheath
B. Dendrites of the next neuron
C. Synaptic cleft
D. Postsynaptic membrane

Q.1088 Resting potential in nerve cells is maintained by:
A. Sodium pumps
B. Potassium pumps
C. Calcium pumps
D. None of the above

Q.1089 What is the condition of the neurons under resting membrane potentials?
A. Inner surface of neuron is more positive
B. Both of these surfaces are equally positive
C. Outer surface of neuron is more positive
D. All of these

Q.1090 Resting membrane potential is:
A. -80 mv
B. -70 mv
C. 50 mv
D. -85 mv

Q.1091 What is the approximate value of the active membrane potential?
A. 0.17V
B. -50mv
C. 0.05 V
D. Both A and B

Q.1092 In myelinated neurons the impulse jumps from node to node, what is this transmission called?
A. Myelinated impulse
B. Jumping impulse
C. Saltatory impulse
D. All of these

Q.1093 Nerve cells transmit messages faster when they have:
A. Many dendrites
B. Myelinated axons
C. Non-myelinated axons
D. Many genes

Q.1094 The sites where nerve impulse is transmitted from the nerve endings to the skeleton muscle cell membranes?
A. Z discs
B. Dendrites
C. Sarcomeres
D. Neuromuscular junctions

Q.1095 Repolarization is restored when:
A. Sodium ions diffuse in
B. Potassium diffuses out
C. Potassium diffuses in
D. Sodium diffuses out

Q.1096 Acetylcholine is:
A. Enzyme
B. Metabolic intermediate
C. PNS neurotransmitter
D. CNS neurotransmitter

Steps involved in nervous coordination

Q.1097 Stretch receptors are present in ___________ of the tetrapods.
A. Hepatic arteries
B. Carotid arteries
C. Renal arteries
D. Pulmonary arteries

Q.1098 Stimulus of deep pressure is detected by:
A. Pacinian corpuscles
B. Krause end bulb
C. Meissner's corpuscles
D. Merkel's endings

Q.1099 Stretch receptors are present in _________________ of tetrapods.
A. Muscles only
B. Organs only
C. Both A and B
D. Bone only

Q.1100 Receptors are:
A. Brain
B. Muscle and glands
C. Eye and nose
D. Nerve cells

Q.1101 Which types of the receptors are present in the ear?
A. Chemoreceptors
B. Photoreceptors
C. Thermoreceptors
D. Mechanoreceptors

Q.1102 After leaving the spinal cord, the spinal nerve gets divided into nerve fibers, connecting to which of the following?
A. Receptors
B. Effectors
C. Midbrain
D. All parts of the body

Q.1103 The sensory neuron has pain-sensitive endings in _______.
A. Hypothalamus
B. Bones
C. Skin
D. Muscles

Q.1104 Synaptic vesicles discharge which of the following chemical at the neuromuscular junction?
A. Acetylcholine
B. Adrenaline
C. Estradiol
D. Testosterone

Q.1105 Components of neural arc:
A. 5
B. 6
C. 7
D. 4

Neurons (Structure and Types)

Q.1106 One of the functions of the neuroglial cells is to protect and support which of the following?
A. Nephrons
B. Myoid cells
C. Neurons
D. none of these

Q.1107 The gap in the myelin sheath between adjacent Schwann cells is called?
A. Dendrite
B. Soma
C. Node of Ranvier
D. Stroma

Q.1108 It carries impulses away from neuron:
A. Axon
B. Dendrites
C. Soma
D. Dendron

Q.1109 The concentrations of the cell bodies of the neurons called?
A. Axons
B. Introns
C. Ganglia
D. Dendrites

Q.1110 ____________ carry information towards the soma of neuron.
A. Dendrites
B. Axon
C. Perikaryon
D. Both A and B

Q.1111 Staining part of neuron is called:
A. Axon
B. Dendrites
C. Cell body
D. A and C

Q.1112 The neurons responsible for converting various external stimuli that come from the environment into corresponding internal stimuli is called:
A. Motor
B. Sensory
C. Both A and
B D. Mixed

Q.1113 Interneuron is also known as:
A. Relay neuron
B. Sensory neuron
C. Mixed neuron
D. Synapse

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Q.1114 Which of the following statement about neuron is incorrect?
A. They not only conduct impulses but also generate them
B. They are not the only cellular component of nervous system
C. They may show limited regenerative capabilities
D. Like all the living cell, when they mature and divide to form similar cells

Q.1115 Motor neuron are multipolar but:
A. Less branched
B. More branched
C. No branched
D. None

Q.1116 Node of Ranvier are also known as:
A. Myelin sheath
B. Neurofibril node
C. Myofibril node
D. None

Q.1117 Nicotine may induce:
A. Vomiting
B. Diarrhoea
C. Tetanus
D. Both A & B

Q.1118 A motor neuron and all the muscle fibers it supplies is called:
A. Motor unit
B. Neuromuscular junction
C. Neural unit
D. Microtubules

Q.1119 The neurons that interpret and receive information and stimulate motor neurons are what type of neuron?
A. Sensory neurons
B. Motor neurons
C. Interneurons
D. Rotator neurons

Q.1120 Which is not a neurotransmitter?
A. Nor-epinephrine
B. L-Dopa
C. Dopamine
D. None

Q.1121 Which form brain and spinal cord?
A. Sensory neurons
B. Motor neurons
C. Interneurons
D. Dendrites

Q.1122 Cytoplasm and ribosomes are present in which part of neuron?
A. Dendrite
B. Cell body
C. Axon
D. All of these

Positive feedback mechanism

Q.1123 Which of the following is not an example of positive feedback?
A. A forest fire slowly expands outward, which provides it with even more fuel to bum.
B. During childbirth, oxytocin creates a stimulus which causes the hypothalamus to release more oxytocin
C. As more buffalo begin to run in a herd, the overall level of panic increases. This results in even more buffalo running.
D. As blood calcium levels increase, parathyroid hormone (PTH) is reduced.

Negative feedback mechanism

Q.1124 One of these processes does not happen as a result of negative feedback mechanism in humans?
A. Secretion of insulin by pancreas in response to increased blood glucose concentration.
B. Secretion of oxytocin in response to dilation of cervix during childbirth.
C. Secretion of glucagon by pancreas in response to decreased blood glucose concentration.
D. All of the above.

Out of Syllabus

Q.1125 When cocaine is used as a stimulant, it interferes with the CNS at the reuptake of which hormone?
A. Testosterone
B. Dopamine
C. Serotonin
D. Adrenaline

Q.1126 Experience has no influence on which type of behavior?
A. Kinesis
B. Imprinting
C. Habituation
D. Insight learning

Q.1127 Which of the following is not a function of Abscisic acid?
A. Inhibits stem and root growth during drought.
B. Closing of stomata during wilting.
C. Inhibits flowering in long-day plants
D. Promotes bud initiation during growth season

Q.1128 Which statement is incorrect about ethylene production?
A. Climacteric is burst of respiratory activity in fruit ripening
B. It is associated with ethane production
C. It helps in fruit ripening
D. It helps in fruit set

SKN

Q.1129 The promoter of leaf senescence is?

A. Gibberellins
B. Cytokinins
C. Auxins
D. Abscisic acid

Q.1130 Disorders caused due to disturbance in nerve impulse generation and transmission is called?

A. Nerve impulse disorder
B. Nervous disorder
C. Transmission disorder
D. Functional disorder

Q.1131 A crawling snail when we tab glass retract into its shell, tapping has no effect. This form of learning is:

A. Habituation
B. Imprinting
C. Insight learning
D. Latent learning

Q.1132 Most of brain tumors are caused by:

A. Mutation in DNA of proteins involved in glycolysis
B. Mutation in DNA of proteins involved in cell cycle regulation
C. Mutation in DNA of proteins involved in fatty acid metabolism
D. Mutation in DNA of proteins involved in extracellular transport

Q.1133 Type of behavior that evolves during life cycle of individual:

A. Learning
B. Instinctive
C. Both A and
B D. None

Q.1134 Brain tumors are due to:

A. Neuroglial cells
B. Neurons
C. Epithelial cells
D. Connective tissues

Q.1135 Memory loss occurs in which disease?

A. Parkinson
B. Alzheimer
C. Epilepsy
D. All of these

Q.1136 In which condition, brain produced more impulses than normal:

A. Epilepsy
B. Alzheimer's disease
C. Parkinson's disease
D. Lou Gehrig's disease

Q.1137 Commercial use of cytokinins:

A. Keeping flower fresh
B. Keeping lettuce fresh
C. Break seed dormancy
D. All of these

Q.1138 Which plant hormone promotes abscission?

A. Auxins
B. Gibberellins
C. Cytokinins
D. Abscisic acid

SKN

1	B	51	D	101	D	151	C	201	B	251	D	301	A	351	B	401	B	451	E	501	A	551	A
2	B	52	B	102	A	152	C	202	A	252	B	302	C	352	C	402	A	452	D	502	C	552	B
3	B	53	D	103	B	153	D	203	A	253	B	303	A	353	B	403	B	453	B	503	D	553	C
4	A	54	C	104	A	154	D	204	C	254	B	304	C	354	D	404	C	454	D	504	B	554	C
5	A	55	D	105	C	155	B	205	A	255	A	305	C	355	B	405	C	455	C	505	D	555	A
6	A	56	C	106	D	156	C	206	C	256	D	306	C	356	D	406	C	456	E	506	D	556	C
7	D	57	B	107	C	157	D	207	B	257	B	307	D	357	D	407	B	457	B	507	C	557	C
8	C	58	B	108	C	158	A	208	C	258	C	308	D	358	B	408	C	458	C	508	A	558	A
9	C	59	C	109	B	159	C	209	D	259	A	309	A	359	A	409	A	459	A	509	C	559	A
10	B	60	C	110	B	160	B	210	C	260	B	310	B	360	C	410	B	460	-	510	D	560	B
11	B	61	A	111	A	161	A	211	D	261	D	311	A	361	D	411	B	461	C	511	A	561	B
12	C	62	B	112	C	162	A	212	A	262	D	312	D	362	C	412	A	462	A	512	C	562	C
13	B	63	A	113	B	163	B	213	C	263	D	313	A	363	D	413	A	463	C	513	A	563	C
14	C	64	B	114	A	164	C	214	B	264	D	314	B	364	C	414	D	464	D	514	A	564	A
15	D	65	D	115	A	165	C	215	D	265	B	315	B	365	D	415	D	465	C	515	C	565	A
16	B	66	B	116	B	166	B	216	B	266	B	316	A	366	B	416	D	466	B	516	C	566	B
17	A	67	C	117	C	167	B	217	A	267	C	317	B	367	A	417	A	467	A	517	D	567	D
18	A	68	C	118	D	168	C	218	C	268	D	318	D	368	B	418	D	468	A	518	B	568	A
19	D	69	A	119	B	169	B	219	A	269	B	319	A	369	A	419	A	469	C	519	C	569	C
20	A	70	B	120	D	170	C	220	C	270	B	320	A	370	D	420	A	470	A	520	A	570	C
21	C	71	C	121	B	171	A	221	B	271	B	321	D	371	D	421	D	471	D	521	D	571	B
22	C	72	B	122	C	172	D	222	B	272	B	322	A	372	C	422	C	472	B	522	A	572	D
23	D	73	D	123	A	173	A	223	C	273	C	323	B	373	A	423	D	473	A	523	D	573	B
24	A	74	A	124	A	174	D	224	C	274	D	324	B	374	D	424	D	474	A	524	A	574	A
25	C	75	C	125	B	175	B	225	C	275	D	325	D	375	A	425	C	475	D	525	B	575	D
26	D	76	A	126	A	176	C	226	B	276	C	326	C	376	C	426	B	476	D	526	D	576	D
27	B	77	A	127	C	177	B	227	B	277	B	327	D	377	D	427	D	477	B	527	B	577	D
28	D	78	D	128	A	178	C	228	D	278	D	328	A	378	A	428	A	478	A	528	A	578	D
29	D	79	D	129	D	179	B	229	A	279	A	329	C	379	B	429	B	479	B	529	A	579	C
30	D	80	D	130	B	180	C	230	B	280	B	330	D	380	C	430	B	480	C	530	B	580	D
31	A	81	A	131	B	181	C	231	D	281	B	331	B	381	B	431	D	481	A	531	A	581	B
32	D	82	B	132	C	182	B	232	B	282	D	332	C	382	C	432	C	482	A	532	D	582	C
33	D	83	B	133	D	183	A	233	B	283	C	333	D	383	A	433	D	483	A	533	B	583	D
34	D	84	B	134	B	184	B	234	B	284	D	334	D	384	A	434	C	484	C	534	B	584	D
35		85	B	135	B	185	C	235	D	285	B	335	A	385	C	435	B	485	C	535	A	585	B
36	B	86	A	136	D	186	D	236	C	286	A	336	D	386	A	436	D	486	B	536	B	586	B
37	A	87	D	137	C	187	B	237	B	287	D	337	B	387	A	437	C	487	-	537	D	587	D
38	B	88	C	138	D	188	D	238	C	288	D	338	C	388	B	438	B	488	B	538	B	588	A
39	B	89	C	139	D	189	A	239	A	289	A	339	A	389	C	439	A	489	C	539	C	589	D
40	C	90	D	140	B	190	C	240	A	290	A	340	A	390	B	440	D	490	A	540	D	590	C
41	A	91	C	141	B	191	B	241	C	291	B	341	A	391	A	441	B	491	B	541	A	591	D
42	B	92	A	142	A	192	B	242	D	292	C	342	A	392	B	442	D	492	A	542	C	592	B
43	A	93	B	143	B	193	C	243	A	293	A	343	A	393	D	443	A	493	C	543	C	593	B
44	B	94	A	144	A	194	A	244	B	294	B	344	B	394	C	444	D	494	D	544	B	594	C
45	C	95	B	145	A	195	A	245	D	295	C	345	B	395	C	445	B	495	A	545	B	595	C
46	C	96	B	146	B	196	D	246	B	296	A	346	C	396	A	446	C	496	C	546	B	596	C
47	A	97	B	147	B	197	A	247	A	297	C	347	B	397	A	447	C	497	A	547	A	597	A
48	A	98	B	148	D	198	A	248	C	298	D	348	B	398	A	448	E	498	A	548	A	598	C
49	A	99	B	149	B	199	C	249	D	299	B	349	A	399	D	449	B	499	B	549	B	599	A
50	B	100	C	150	C	200	C	250	C	300	D	350	A	400	C	450	D	500	D	550	B	600	C

601	B	651	C	701	C	751	D	801	B	851	D	901	B	951	D	1001	D	1051	B	1101	D
602	A	652	D	702	C	752	D	802	C	852	C	902	C	952	B	1002	A	1052	C	1102	B
603	D	653	D	703	B	753	B	803	B	853	C	903	C	953	A	1003	D	1053	D	1103	C
604	C	654	B	704	C	754	C	804	B	854	C	904	C	954	B	1004	B	1054	D	1104	A
605	C	655	D	705	D	755	C	805	C	855	B	905	B	955	A	1005	A	1055	B	1105	A
606	C	656	D	706	B	756	A	806	C	856	D	906	D	956	A	1006	C	1056	D	1106	C
607	C	657	C	707	C	757	B	807	B	857	D	907	B	957	D	1007	B	1057	B	1107	C
608	D	658	B	708	C	758	D	808	B	858	C	908	D	958	D	1008	A	1058	B	1108	A
609	D	659	D	709	B	759	D	809	B	859	A	909	D	959		1009	B	1059	C	1109	C
610	B	660	C	710	D	760	B	810	C	860	C	910	D	960	D	1010	B	1060	C	1110	A
611	A	661	C	711	B	761	A	811	B	861	B	911	D	961	C	1011	B	1061	A	1111	C
612	B	662	C	712	B	762	B	812	B	862	D	912	C	962	B	1012	A	1062	B	1112	B
613	A	663	D	7713	A	763	C	813	A	863	A	913	B	963	B	1013	D	1063	B	1113	A
614	C	664	D	714	D	764	D	814	D	864	D	914	B	964	D	1014	A	1064	D	1114	D
615	C	665	B	715	D	765	A	815	A	865	D	915	C	965	B	1015	A	1065	D	1115	A
616	D	666	B	716	D	766	C	816	C	866	C	916	D	966	B	1016	C	1066	B	1116	D
617	A	667	D	717	B	767	B	817	C	867	B	917	A	967	B	1017	C	1067	D	1117	D
618	B	668	B	718	B	768	A	818	B	868	D	918	C	968	A	1018	C	1068	A	1118	A
619	A	669	C	719	C	769	D	819	D	869	C	919	A	969	D	1019	B	1069	C	1119	C
620	D	670	B	720	D	770	B	820	D	870	C	920	D	970	D	1020	B	1070	C	1120	B
621	C	671	D	721	A	771	C	821	D	871	D	921	D	971	A	1021	A	1071	C	1121	C
622	C	672	B	722	C	772	B	822	C	878	C	922	B	972	D	1022	C	1072	D	1122	B
623	D	673	A	723	B	773	D	823	B	872	C	923	A	973	A	1023	B	1073	C	1123	D
624	B	674	D	724	D	774	C	824	C	874	C	924	D	974	D	1024	C	1074	B	124	B
625	B	675	C	725	C	775	A	825	D	875	B	925	B	975	B	1025	B	1075	D	1125	B
626	D	676	B	726	A	776	A	826	D	876	B	926	A	976	B	1026	C	1076	A	1126	A
627	C	677	C	727	A	777	A	827	D	877	B	927	B	977	A	1027	B	1077	A	1127	D
628	C	678	C	728	A	778	C	828	D	878	B	928	A	978	C	1028	A	1078	A	1128	A
629	D	679	B	729	B	779	A	829	D	879	B	929	A	979	B	1029	D	1079	D	1129	D
630	C	680	A	730	A	780	B	830	D	880	B	930	C	980	C	1030	D	1080	B	1130	B
631	C	681	D	731	D	781	C	831	C	881	A	931	A	981	D	1031	B	1081	A	1131	A
632	D	682	B	732	A	782	A	832	A	882	D	932	A	982	A	1032	A	1082	D	1132	B
633	C	683	B	733	C	783	C	833	A	883	C	933	B	983	D	1033	A	1083	A	1133	A
634	D	684	B	734	C	784	B	834	B	884	C	934	C	984	A	1034	B	1084	D	1134	A
635	D	685	A	735	C	785		835	A	885	D	935	D	985	A	1035	A	1085	B	1135	B
636	C	686	D	736	A	786	A	836	A	886	D	936	B	986	D	1036	B	1086	B	1136	A
637	B	687	B	737	C	787	B	837	C	887	B	937	C	987	A	1037	A	1087	C	1137	D
638	C	688	C	738	D	788	B	838	B	888	C	938	C	988	B	1038	A	1088	D	1138	D
639	A	689	D	739	D	789	D	839	C	889	C	939	A	989	B	1039	C	1089	C		
640	A	690	B	740	B	790	B	840	B	890	B	940	D	990	B	1040	C	1090	B		
641	D	691	A	741	C	791	C	841	B	891	C	941	D	991	D	1041	C	1091	C		
642	D	692	D	742	C	792	D	842	A	892	C	942	A	992	D	1042	D	1092	C		
643	A	693	C	743	D	793	A	843	C	893	D	943	D	993	D	1043	A	1093	B		
644	A	694	D	744	B	794	B	844	B	894	C	944	D	994	B	1044	C	1094	D		
645	A	695	B	745	D	795	D	845	D	895	C	945	B	995	B	1045	A	1095	B		
646	B	696	B	746	C	796	C	846	C	896	B	946	A	996	C	1046	B	1096	C		
647	C	697	A	747	A	797	A	847	B	897	D	947	D	997	D	1047	D	1097	B		
648	C	698	C	748	B	798	D	848	C	898	D	948	B	998	B	1048	B	1098	A		
649	A	699	B	749	D	799	C	849	B	899	B	949	A	999	A	1049	C	1099	C		
650	D	700	B	750	A	800	A	850	B	900	A	950	B	1000	C	1050	D	1100	C		